

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**THE ROLE OF CUSTOMER RELATIONSHIP MANAGEMENT,
SERVICE QUALITY AND INNOVATION AS SOURCES OF BRAND
EQUITY DEVELOPMENT**

By

FAYEZ BASSAM FAYEZ SHRIEDEH



UUM
Universiti Utara Malaysia

**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**

PERMISSION TO USE

In presenting this thesis in fulfillment of the requirements for a postgraduate degree from the Universiti Utara Malaysia (UUM), I agree that the library of this university may make it freely available for inspection. I further agree that permission for copying this thesis in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor or in their absence, by the Dean of Othman Yeop Abdullah School of Business where I did my thesis. It is understood that any copying or publication or use of this thesis or parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the Universiti Utara Malaysia (UUM) in any scholarly use which may be made of any material in my thesis.

Request for permission to copy or to make other use of materials in this thesis in whole or in part should be addressed to:

Dean of Othman Yeop Abdullah School of Business
Universiti Utara Malaysia
06010 UUM Sintok
Kedah Darul Aman



UUM
Universiti Utara Malaysia

ABSTRACT

In the highly competitive medical tourism market environment of today, Brand Equity (BE) could become a competitive edge for survival for service providers. In general, medical tourism has been perceived to have a low BE, especially in Jordan. The contribution of Customer Relationship Management (CRM), Service Quality (SQ), and innovation in developing BE, cannot be ignored as far as literature is concerned. However, studies on marketing activities towards building BE remain limited. Hence, this study aims to investigate the contributions of CRM, SQ and innovation in developing BE, to medical tourism service providers. Since a sampling frame was not available, the study obtained its data through systematic sampling using a self-administered questionnaire to build a sampling frame of medical tourists. Some 500 respondents were next selected randomly from the sampling frame using the simple random sampling technique. The Structural Equation Modeling (SEM) procedure in IBM-SPSS-Amos 23.0 was used for data analysis. The findings indicated that both CRM and SQ had significant effects on innovation. Innovation, on the other hand, had a significant effect on BE. However, only SQ had significant direct effects on BE while the direct effects of CRM were not quite significant. The results imply that the mediating innovation plays a full mediation role in linking CRM to BE, while innovation plays a partial mediation role in linking SQ to BE. These findings offer several contributions towards building BE as a competitive edge as far as medical tourism service providers are concerned. Future research should incorporate other constructs that may enhance BE. Other mediators are also recommended for future research on the impacts of both CRM and SQ on the BE.

Keywords: customer relationship management, service quality, innovation, brand equity, medical tourism.

ABSTRAK

Dalam persekitaran pasaran pelancongan perubatan yang mempunyai persaingan sengit hari ini, Ekuiti Jenama (BE) boleh menjadi kelebihan persaingan dalam kalangan pemberi perkhidmatan pelancongan perubatan. Secara umumnya, persepsi BE pelancongan perubatan di Jordan adalah rendah. Mengikut tinjauan literatur, sumbangan Pengurusan Perhubungan Pelanggan (CRM), Kualiti Perkhidmatan (SQ) dan inovasi terhadap pembentukan BE tidak boleh diabaikan. Namun begitu, masih kurang kajian terhadap aktiviti pemasaran bagi membangunkan BE yang dijalankan. Oleh itu, kajian ini ingin menilai pengaruh CRM, SQ serta inovasi terhadap pembentukan BE bagi pemberi perkhidmatan pelancongan perubatan. Oleh kerana tiada rangka persampelan yang tersedia, penyelidik menggunakan kaedah persampelan sistematik bertujuan untuk mengumpul data melalui soal selidik yang ditadbir sendiri bagi membina rangka persampelan ini. Sebanyak 500 responden untuk kajian ini dicerap daripada rangka persampelan menggunakan kaedah persampelan rawak mudah. Data dianalisis melalui kaedah Pemodelan Persamaan Berstruktur (SEM) dengan menggunakan perisian IBM-SPSS-Amos 23.0. Dapatan analisis mendapati konstruk CRM dan SQ mempunyai kesan yang signifikan terhadap inovasi, dan konstruk inovasi pula mempunyai kesan yang signifikan terhadap BE. Walau bagaimanapun hanya konstruk SQ mempunyai kesan langsung ke atas BE manakala CRM pula tidak mempunyai kesan langsung. Ini bermakna konstruk pengantara iaitu inovasi mempunyai kesan pengantaraan penuh dalam menghubungkan konstruk CRM dengan BE, dan mempunyai kesan pengantaraan separa dalam hubungan di antara konstruk SQ dengan BE. Dapatan kajian ini memberi beberapa sumbangan bermakna dalam pembinaan BE sebagai kelebihan persaingan kepada pemberi perkhidmatan dalam industri pelancongan perubatan. Kajian akan datang perlu mengambil kira konstruk lain yang boleh meningkatkan BE. Selain itu, faktor pengantara lain turut disarankan untuk kajian pada masa hadapan bagi mengkaji kesan CRM dan SQ ke atas BE.

Kata kunci: pengurusan perhubungan pelanggan, kualiti perkhidmatan, inovasi, ekuiti jenama, pelancongan perubatan.

ACKNOWLEDGEMENT

In the name of Allah, Most Gracious, Most Merciful.

"Alhamdulillah", I wish to express my humble gratefulness to almighty Allah SWT, the One and Only One who granted me the perseverance and ability to complete my PhD thesis successfully. May the peace and blessings of Allah be upon the prophet Mohammad SAW, his family, and his companions from whom we gain the enlightenment.

Firstly and foremost, the greatest appreciation must be paid to my experienced supervisor, Associate Professor Dr. Noor Hasmini Abd. Ghani, who provided invaluable suggestions and constant guidance throughout this research. I am very grateful for her endless support, enthusiastic supervision, insightful ideas, and critical review comments. Without her guidance and support, I would not have been able to complete this thesis. My thanks also go to my viva committee members, for their considerate comments and suggestions regarding this study.

My appreciation is also addressed to everybody in College of Business Universiti Utara Malaysia for their unwavering support and being very helpful during the years of my research.

I also sincerely like to thank those who participated in this study for sharing their experiences with me, field experts, private hospitals, and medical tourists. My gratitude to Mr. Khalid Thnaibat and his team, for their moral support and assistance during data collection.

I would like to acknowledge a debt of gratitude that could never be repaid to my parents (Bassam and Seham) for supporting my decision to follow my PhD dream with enormous love and encouragement. I am also grateful to my parents in law (Adnan and Sameera) for their trust, care, and empathy. A note of thanks also goes to my brothers and sisters.

Finally, and most importantly, I would like to express my deepest appreciation, gratitude and affection to my beloved wife Dr. Reem Issa and our daughters, Yara and the one who is on the way (Naya). Thank you for your endless love, patience, encouragement, and inspiration throughout this challenging work. It was and remains my driving force.

PUBLICATIONS DERIVED FROM THIS RESEARCH

- **Scopus Journals**

1. Shriedeh, F., & Abd. Ghani, N. H. (2017). Impact of customer relationship management on brand equity: Medical tourist perspective. *Research Journal of Business Management*. 11(1), 28-38.
2. Shriedeh, F. B., & Abd. Ghani, N. H. (2017). Service quality as an antecedent of brand equity: Empirical evidence in the medical tourism from Jordan. *International Review of Management and Marketing*. 7(1), 15-19.

- **Refereed Journals**

3. Shriedeh, F. B., & Abd. Ghani, N. H. (2018). Strategic factors for building brand equity: Jordan medical tourism. *Jurnal The Messenger, Indonesia* (Accepted).
4. Shriedeh, F. B., & Abd. Ghani, N. H. (2018). The role of customer relationship management, service quality and innovation as sources of brand equity development. *Proceedings of the SMMTC Postgraduate Symposium: Advancing Research in Communication, Media and Multimedia: Theory Methodology and Applications* (pp. 50-55). Universiti Utara Malaysia, Malaysia.
5. Shriedeh, F. B., & Ghani, N. H. A. (2016). Impact of innovation on the relationship between customer relationship management and brand equity in the medical tourism of Jordan. *Journal of Research in Business, Economics and Management*, 7(4), 1150-1158.
6. Shriedeh, F. B., & Ghani, N. H. A. (2016). Innovation's effect on brand equity: Insights from medical tourists. *Journal of Asian Business Strategy*, 6(8), 176-184.

TABLE OF CONTENTS

TITLE PAGE	i
CERTIFICATION OF THESIS WORK	ii
PERMISSION TO USE	iv
ABSTRACT	v
ABSTRAK	vi
ACKNOWLEDGEMENT	vii
PUBLICATIONS DERIVED FROM THIS RESEARCH	viii
TABLE OF CONTENTS	ix
LIST OF TABLES	xiv
LIST OF FIGURES	xvi
LIST OF ABBREVIATIONS	xvii
LIST OF APPENDICES	xix
 CHAPTER ONE: INTRODUCTION	 1-36
1.1 INTRODUCTION	1
1.2 BACKGROUND OF THE STUDY	1
1.3 JORDAN HEALTHCARE SCENARIO	8
1.4 PROBLEM STATEMENT	17
1.5 RESEARCH QUESTIONS	29
1.6 RESEARCH OBJECTIVES	29
1.7 SIGNIFICANCE OF STUDY	30
1.7.1 Theoretical Contributions	30
1.7.2 Practical Contributions	31
1.8 SCOPE OF THE STUDY	32
1.9 DEFINITION OF KEY TERMS	34
1.10 ORGANIZATION OF THE STUDY	35
 CHAPTER TWO: LITERATURE REVIEW	 37-151
2.1 INTRODUCTION	37
2.2 THE CONCEPT OF BRAND EQUITY	37
2.2.1 Brand Equity Dimensionality Concept	43
2.2.1.1 Brand Awareness	45
2.2.1.2 Brand Associations	46
2.2.1.3 Brand Loyalty	47
2.2.1.4 Perceived Quality	48
2.3 BRAND EQUITY CONSEQUENCES: THE EMPIRICAL EVIDENCE	50
2.4 BRAND EQUITY ANTECEDENTS: THE EMPIRICAL EVIDENCE	54
2.5 RELATIONSHIP MARKETING (RM) AND CUSTOMER RELATIONSHIP MANAGEMENT (CRM)	61
2.5.1 The Emergence of Relationship Marketing and Concept	61
2.6 THE CONCEPT OF CUSTOMER RELATIONSHIP MANAGEMENT	64
2.6.1 Customer Relationship Management Dimensions	69
2.6.1.1 Knowledge Management (KM)	69

2.6.1.2	Technology-based CRM	72
2.6.1.3	Customer Involvement	72
2.6.1.4	Long-term Association	74
2.6.1.5	Joint Problem Solving	75
2.7	CUSTOMER RELATIONSHIP MANAGEMENT CONSEQUENCES: THE EMPIRICAL EVIDENCE	76
2.8	CUSTOMER RELATIONSHIP MANAGEMENT AND INNOVATION	86
2.9	THE CONCEPT OF SERVICE	89
2.9.1	The Characteristics of Service	89
2.10	THE CONCEPT OF SERVICE QUALITY (SQ)	90
2.10.1	Service Quality Multidimensionality Concepts and Models	93
2.11	PERFORMANCE-BASED SERVICE QUALITY (SERVPERF)	99
2.12	SERVICE QUALITY CONSEQUENCES: THE EMPIRICAL EVIDENCE	101
2.13	SERVICE QUALITY AND INNOVATION	111
2.14	THE CONCEPT OF INNOVATION	114
2.14.1	Types of Innovation	116
2.14.1.1	Product Innovation	116
2.14.1.2	Service Innovation	117
2.14.1.3	Process Innovation	118
2.14.1.4	Marketing Innovation	118
2.14.1.5	Administrative Innovation	119
2.15	INNOVATION CONSEQUENCES: THE EMPIRICAL EVIDENCE	120
2.16	THEORETICAL UNDERPINNING	129
2.16.1	Theory of Customer-based Brand Equity (CBBE)	129
2.17	THEORETICAL FRAMEWORK OF THE STUDY	136
2.18	HYPOTHESES DEVELOPMENT	142
2.18.1	Customer Relationship Management and Overall Brand Equity	142
2.18.2	Customer Relationship Management and Innovation	144
2.18.3	Innovation and Overall Brand Equity	145
2.18.4	Service Quality and Overall Brand Equity	146
2.18.5	Service Quality and Innovation.	147
2.18.6	Mediating Effects of Innovation on the Relationship between Customer Relationship Management and Overall Brand Equity	148
2.18.7	Mediating Effects of Innovation on the Relationship between Service Quality and Overall Brand Equity	149
2.19	CHAPTER SUMMARY	150
CHAPTER THREE: METHODOLOGY		152-206
3.1	INTRODUCTION	152
3.2	RESEARCH DESIGN	152
3.2.1	Unit of Analysis	153
3.2.2	Target Population	154
3.2.3	Sampling Frame	158

3.2.4	Sampling Design	160
3.2.4.1	Sample Size	160
3.2.4.2	Sampling Methodology	163
3.2.5	Operational Definition of Variables	166
3.2.5.1	Operational Definition of Overall Brand Equity	166
3.2.5.2	Operational Definition of Customer Relationship Management	167
3.2.5.3	Operational Definition of Service Quality	167
3.2.5.4	Operational Definition of Innovation	168
3.2.6	Research Instruments	169
3.2.7	Measurement of Variables	170
3.2.7.1	Customer Relationship Management	172
3.2.7.2	Service Quality	173
3.2.7.3	Innovation	175
3.2.7.4	Overall Brand Equity	176
3.2.8	Questionnaire Instrument	176
3.2.8.1	Questionnaire Design and Layout	176
3.2.8.2	Translation of the Questionnaire	178
3.3	DATA COLLECTION PROCEDURES	179
3.3.1	Pre-Test Study	179
3.3.2	Pilot Study	182
3.3.2.1	Exploratory Factor Analysis (EFA)	185
3.3.2.1.1	Results of EFA on Customer Relationship Management	189
3.3.2.1.2	Results of EFA on Service Quality	192
3.3.2.1.3	Results of EFA on Innovation	194
3.3.2.1.4	Results of EFA on Overall Brand Equity	197
3.3.2.2	Reliability Test for Pilot Study	199
3.3.3	Main Study	200
3.4	STATISTICAL ANALYSIS PROCEDURES	203
3.5	CHAPTER SUMMARY	205
CHAPTER FOUR: DATA ANALYSIS AND FINDINGS		207-280
4.1	INTRODUCTION	207
4.2	OVERVIEW OF THE DATA COLLECTED	207
4.2.1	Response Rate	208
4.3	PREPARATION OF THE DATA FOR ANALYSIS	209
4.3.1	Data Coding and Data Entry	209
4.3.2	Missing Data	210
4.4	COMPARE GROUP STATISTICS	211
4.5	DESCRIPTIVE STATISTICS	213
4.5.1	Respondent Demographic Profiles	214
4.5.2	Descriptive Analysis of the Variables	217
4.6	PRELIMINARY DATA ANALYSIS	219

4.6.1	Outliers	219
4.6.2	Non-Response Bias	222
4.7	UNDERLYING STATISTICAL ASSUMPTIONS	224
4.7.1	Normality Assumption	224
4.7.2	Linearity Assumption	227
4.7.3	Homoscedastic Assumption	228
4.7.4	Multicollinearity Assumption	229
4.8	GOODNESS OF MEASURES	231
4.8.1	Face Validity	231
4.8.2	Content Validity	232
4.8.3	Construct Validity	232
4.8.4	Convergent Validity	236
4.8.5	Discriminant Validity	236
4.8.6	Construct Reliability	237
4.9	STRUCTURAL EQUATION MODELING (SEM)	238
4.10	CONFIRMATORY FACTOR ANALYSIS (CFA)	242
4.10.1	CFA for Validating Customer Relationship Management Construct	246
4.10.2	CFA for Validating Service Quality Construct	251
4.10.3	CFA for Validating Innovation Construct	256
4.11	POOLED MEASUREMENT MODEL	262
4.1	STRUCTURAL MODEL AND STRUCTURAL EQUATION MODELING	269
4.1	HYPOTHESES TESTING	272
4.13.1	Direct Hypotheses Testing	272
4.13.2	Indirect Hypotheses Testing	274
4.13.2.1	Mediating Effects of Innovation between CRM and Overall Brand Equity	276
4.13.2.2	Mediating Effects of Innovation between SQ and Overall Brand Equity	278
4.1	CHAPTER SUMMARY	279
CHAPTER FIVE: DISCUSSION AND CONCLUSION		281-312
5.1	INTRODUCTION	281
5.2	RECAPITULATION OF THE MAIN STUDY FINDINGS	281
5.3	DISCUSSION	284
5.3.1	The Effects of Customer Relationship Management on Overall Brand Equity	284
5.3.2	The Effects of Customer Relationship Management on Innovation	288
5.3.3	The Effects of Innovation on Overall Brand Equity	290
5.3.4	The Effects of Service Quality on Overall Brand Equity	292
5.3.5	The Effects of Service Quality on Innovation	295
5.3.6	The Mediation Effects of Innovation between Customer Relationship Management and Overall Brand Equity	297
5.3.7	The Mediation Effects of Innovation between Service Quality and Overall Brand Equity	299

5.4	IMPLICATION OF THE RESEARCH	302
5.4.1	Theoretical Implications	302
5.4.2	Practical Implications	306
5.5	LIMITATIONS AND SUGGESTION FOR FUTURE RESEARCH	309
5.6	CONCLUSION	311
REFERENCES		313



UUM
 Universiti Utara Malaysia

LIST OF TABLES

Table		Page
Table 1.1	Medical Tourist Arrivals by Region (million)	3
Table 1.2	Total Expenditure (USD) on Health from 2008 to 2012	10
Table 1.3	No. of Beds and No. of Hospitals from 2005 to 2014	11
Table 1.4	Total Income and Number of Medical Tourists' Arrival to Jordan from 2009 to 2015	19
Table 1.5	Approximate Number of Medical Tourists' Arrival to Jordan, Dubai, and Singapore in 2014 and 2015	20
Table 1.6	Health Bodies, Average Number of Beds, Admissions, Market Share, Occupancy Rates, and Length of Stay from 2010 to 2014	21
Table 1.7	The Definitions of the Variables Used in the Study	34
Table 2.1	Definitions of Brand Equity	39
Table 2.2	Previous Research on Brand Equity from Different Perspectives	42
Table 2.3	Brand Equity Consequences: The Empirical Evidence	51
Table 2.4	Brand Equity Antecedents: The Empirical Evidence	57
Table 2.5	Definitions of Relationship Marketing	63
Table 2.6	Dominant Perspectives on Customer Relationship Management	66
Table 2.7	Customer Relationship Management Consequences: The Empirical Evidence	81
Table 2.8	Definitions of Service Quality	91
Table 2.9	Multidimensionality of Service Quality: Models, Dimensions, and Definitions	97
Table 2.10	Service Quality Consequences: The Empirical Evidence	103
Table 2.11	Definitions of Innovation	115
Table 2.12	Innovation Consequences: The Empirical Evidence	123
Table 2.13	Innovation as a Mediator: The Empirical Evidence	127
Table 2.14	The Linkages between Research Questions, Research Objectives, and Research Hypotheses	150
Table 3.1	Sample Size Distribution of Questionnaire	163
Table 3.2	Operational Definition of Customer Relationship Management	167
Table 3.3	Operational Definition of Service Quality	168
Table 3.4	Operational Definition of Innovation	168
Table 3.5	The Number of Items and Original Value of Cronbach's Alpha	170
Table 3.6	The Items Used to Measure Customer Relationship Management	173
Table 3.7	The Items Used to Measure Service Quality	174
Table 3.8	The Items Used to Measure Innovation	175
Table 3.9	The Items Used to Measure Overall Brand Equity	176
Table 3.10	Allocation of Sample Size of Pilot Study	183
Table 3.11	Descriptive Statistics of Customer Relationship Management Measurement Items	190
Table 3.12	EFA on Customer Relationship Management	191
Table 3.13	Descriptive Statistics of Service Quality Measurement Items	192

Table 3.14	EFA on Service Quality	194
Table 3.15	Descriptive Statistics of Innovation Measurement Items	195
Table 3.16	EFA on Innovation	196
Table 3.17	Descriptive Statistics of Overall Brand Equity Measurement Items	197
Table 3.18	EFA on Overall Brand Equity	198
Table 3.19	Reliability Test for Pilot Study	199
Table 3.20	Statistical Analysis Procedures, Mechanisms and Programs	204
Table 4.1	Summary of the Response Rate	208
Table 4.2	Descriptive Analysis between Phase One and Phase Two (n=491)	211
Table 4.3	Levene's Test of Variation	213
Table 4.4	Summary of Demographic Characteristics (n=491)	215
Table 4.5	Descriptive Analysis of the Variables (n=491)	219
Table 4.6	Mahalanobis Distance Test (n=491)	220
Table 4.7	Outliers List	221
Table 4.8	Group Statistics of Main Variables (n=454)	223
Table 4.9	Independent Samples Test of Main Variables (n=454)	223
Table 4.10	Skewness and Kurtosis Statistical Values of Normality	227
Table 4.11	Collinearity Statistics	230
Table 4.12	Goodness of Fit Indices and their Level of Acceptance	235
Table 4.13	The Research Hypotheses to be Tested and the Statistical Analysis to be Employed in this Study	242
Table 4.14	Validity Tests for CRM Construct	249
Table 4.15	Summary of GOF for CRM	250
Table 4.16	Validity Tests for SQ Construct	255
Table 4.17	Summary of GOF for SQ	256
Table 4.18	Validity Tests for Innovation Construct	260
Table 4.19	Summary of GOF for Innovation	261
Table 4.20	Validity Tests for the Pooled-CFA Constructs	264
Table 4.21	Summary of GOF for the Pooled-CFA Constructs	266
Table 4.22	The Discriminant Validity Summary Index for all Constructs	267
Table 4.23	Normality Assessment for all Variables in the Model	268
Table 4.24	Summary of GOF for the Structural Hypothesized Model	271
Table 4.25	Direct Hypotheses Results	273
Table 4.26	Standardized Regression Weights (SRW) and its Probability Value (p)	276
Table 4.27	Summary-Mediating Effect of Innovation between CRM and Overall Brand Equity	278
Table 4.28	Summary-Mediating Effect of Innovation between SQ and Overall Brand Equity	279
Table 5.1	Summary of GOF of Measurement and Structural Models	283
Table 5.2	Summary of the Study Hypotheses	283

LIST OF FIGURES

Figure		Page
Figure 2.1	Original Brand Equity Building Model, Aaker (1991)	132
Figure 2.2	Brand Equity Building Model, Yoo et al. (2000)	134
Figure 2.3	Theoretical Framework of the Study	141
Figure 4.1	The Research Framework Constructs and their Respective Measures	241
Figure 4.2	The Initial CFA Output for CRM Construct	246
Figure 4.3	The New Output for CRM Construct after e15 and e18 were Deleted	247
Figure 4.4	The Initial CFA Output for SQ Construct	252
Figure 4.5	The New CFA Output for SQ Construct after e10, e5, e15, and e7 were deleted	253
Figure 4.6	The Initial CFA Output for Innovation Construct	257
Figure 4.7	The New CFA Output for Innovation Construct after MK2, AD3, e6, e10, and e1 were deleted	258
Figure 4.8	Pooled Measurement Model through Pooled-CFA	263
Figure 4.9	Structural Hypothesized Model	270
Figure 4.10	The Regression Path Coefficients for the Structural Hypothesized Model	273
Figure 4.11	Triangle Method-Mediating Role of Innovation between CRM and Overall BE	277
Figure 4.12	Triangle Method-Mediating Role of Innovation between SQ and Overall BE	278

LIST OF ABBREVIATIONS

(α)	Cronbach's alpha
AGFI	Adjusted Goodness of Fit Index
AMOS	Analysis of Moments Structures
AVE	Average Variance Extracted
BC	Bias-Corrected
BE	Brand Equity
C.R	Critical Ratio
CBBE	Customer Based Brand Equity
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CI	Confidence Intervals
CR	Composite Reliability
CRM	Customer Relationship Management
df	Degree of Freedom
EFA	Exploratory Factor Analysis
GDP	Gross Domestic Product
GFI	Goodness of Fit Index
GOF	Goodness of Fit Indices
HCSQ	Healthcare SQ Model
IFI	Incremental Fit Index
IMTJ	International Medical Travel Journal
JUH	Jordan University Hospital
KAH	King Abdullah Hospital
KM	Knowledge Management
KMO	Kaiser-Meyer-Olkin
MI	Modification Indices
MOH	Ministry of Health
MTA	Ministry of Tourism and Antiquities
MTI	Medical Tourism Index
NGOS	Non Governmental Profit Organization
OLS	Ordinary Least Square
PCA	Principle Component Analysis
PHA	Private Hospitals Association
R ²	Coefficient of Determination
RBV	Resource Based View
RM	Relationship Marketing
RMS	Royal Medical Services
RMSEA	Root Mean Square Error of Approximation
S.E	Standard Error of Regression Weight
SD	Standard Deviation
SEM	Structural Equation Modeling
SERVPERF	Performance-Based Service Quality

SERVQUAL	Service Quality Scale
SMC	Squared Multiple Correlations
SPSS	Statistical Package for Social Sciences
SQ	Service Quality
SRW	Standardized Regression Weights
TLI	Tucker-Lewis Index
VIF	Variance Inflation Factor



UUM
 Universiti Utara Malaysia

LIST OF APPENDICES

APPENDIX A	Summary of Overall Brand Equity Sources	397
APPENDIX B PART 1	Pilot Study Questionnaire	399
APPENDIX B PART 2	Field Study Questionnaire	405
APPENDIX B PART 3	Pilot Study Arabic Questionnaire	410
APPENDIX B PART 4	Field Study Arabic Questionnaire	415
APPENDIX C PART 1	Request to Participate	419
APPENDIX C PART 2	Approval Letters	420
APPENDIX D	Exploratory Factor Analysis	423
APPENDIX E	Data Coding and Entry	433
APPENDIX F	Frequency Statistics of Respondents	437
APPENDIX G	Descriptive Statistics of Measurement Items	439
APPENDIX H PART 1	Non Response Bias for Study Constructs between Morning and Afternoon Period	441
APPENDIX H PART 2	Non Response Bias for Demographic Factors between Morning and Afternoon Period	444
APPENDIX H PART 3	Non Response Bias for Study Constructs between First Time and Repeat Time Medical Tourists	446
APPENDIX I	Normality Test Using SPSS and AMOS	449
APPENDIX J	Normality, Linearity and Homoscedasticity	452
APPENDIX K	Research Contribution Compared with Initial Overall Brand Equity Model and Earlier Research	455



Universiti Utara Malaysia

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

This chapter starts with a research background to give an idea about the area of the thesis to the reader. This will be followed by the Jordanian healthcare scenario, problem statement, research questions, and research objectives. These are followed by an explanation of the significance of the study and scope, as well as definitions of the key terms. Finally, this chapter ends with a discussion on the organization of the remaining chapters.

1.2 BACKGROUND OF THE STUDY

The global growth in the flow of patients across borders to obtain medical treatment such as fertility treatment, dental care, elective surgery, and cosmetic surgery has given rise to new patterns of consumption and production of healthcare services over recent decades (Connell, 2013). The new moniker for this type of travel “medical tourism” has become big business, involving millions of travelers annually and one of the most rapidly growing global multi-billion dollar healthcare-industry for many developed and developing countries (Guiry, Scott, & Vequist, 2013).

According to Watson and Stolley (2012), medical tourism is the fastest growing segment of the tourist market. Globally, as an export category, it has been ranked as the fourth fastest growing industry after fuel, food and automobile, in volume (Ağaoğlu, 2015). For example, global medical tourism

The contents of
the thesis is for
internal user
only

REFERENCES

- Aaker, D. A. (1991). *Managing brand equity*. New York, NY: The Free Press.
- Aaker, D. A. (1996). *Building strong brands*. New York, NY: The Free Press.
- Aaker, D. A. (2010). *Building strong brands* (9th ed.). London: Pocket Books.
- Aaker, D. A. (2014). *Aaker on branding: 20 principles that drive success*. New York, NY: Morgan James.
- Aaker, D. A., & Joachimsthaler, E. (2000). *Brand leadership*. New York, NY: The Free Press.
- Aaker, D. A., & McLoughlin, D. (2010). *Strategic market management: Global perspectives*. Hoboken, NJ: John Wiley & Sons.
- Abbasi, H., Abbasi, H. R., Hajirasouliha, M., & Faraji, A. (2014). Investigating the effects of different levels of CRM investment on development of brand equity. *Management Science Letters*, 4(4), 647–650.
- Abdel Jawad, R. (2014). *Barriers to and CSF's for exporting health services: The case of Jordan*. (Unpublished master thesis). Universiteit Hasselt, Belgium.
- Abu ElSamen, A. A. (2015). Online service quality and brand equity: The mediational roles of perceived value and customer satisfaction. *Journal of Internet Commerce*, 14(4), 509-530.

- Achmad, F. (2015). The effect of tourism service quality, tourist destination image and experience of tourist towards tourists' satisfaction, tourism word of mount, tourist destination preferences, and tourist destination loyalty (a study on foreign tourists in tourist destination. *European Journal of Business and Management*, 7(2), 95-103.
- Adalikwu, C. (2012). Customer relationship management and customer satisfaction. *African Journal of Business Management*, 6(22), 6682-6686.
- Ağaoğlu, S. (2015). Medical tourism assessment: Case of Izmir. *Journal of Hospitality and Management Tourism*, 8(4), 1-6.
- Agariya, A. K., & Singh, D. (2013). CRM scale development and validation in Indian public hospitals. *Journal of Health Management*, 15(2), 275-291.
- Agarwal, S., Erramilli, M. K., & Dev, C. S. (2003). Market orientation and performance in service firms: Role of innovation. *Journal of Services Marketing*, 17(1), 68-82.
- Ahmad, A. M. K. (2007). *The impact of competitive environment on the service marketing mix strategy of health organizations in developing countries: Jordanian private sector hospital senior managers perspective*. (Unpublished doctoral thesis). University of Huddersfield, Huddersfield, UK.
- Ahmad, F., & Sherwani, N. U. K. (2015). An empirical study on the effect of brand equity of mobile phones on customer satisfaction. *International Journal of Marketing Studies*, 7(2), 59-69.

- Akbar, M. M., & Parvez, N. (2009). The impact of service quality, trust, and customer satisfaction on customer loyalty. *ABAC Journal*, 29(1), 24-38.
- Akbar, U. S., & Azhar, S. M. (2011). The drivers of brand equity: Brand image, brand satisfaction and brand trust. *Sukkur Institute of Business Administration*, 45(2), 29-47.
- Akdeniz, M. B., & Calantone, R. J. (2017). A longitudinal examination of the impact of quality perception gap on brand performance in the US automotive industry. *Marketing Letters*, 28(1), 43-57.
- Akgün, A. E., Keskin, H., & Byrne, J. (2009). Organizational emotional capability, product and process innovation, and firm performance: An empirical analysis. *Journal of Engineering and Technology Management*, 26(3), 103–130.
- Akhavan, A. (2012). *An analysis of the North Cyprus image from the foreign tourists' perceptions*. (Unpublished doctoral thesis). Eastern Mediterranean University, Cyprus.
- Akroush, M. N., Dahiyat, S. E., Gharaibeh, H. S., & Abu-Lail, B. N. (2011). Customer relationship management implementation: An investigation of a scale's generalizability and its relationship with business performance in a developing country context. *International Journal of Commerce and Management*, 21(2), 158–190.

- Akter, S. & Hani, U. (2011). Modeling the effects of quality in a transformative health service. In *Australian and New Zealand Marketing Academy Conference*, (pp. 1-9). Perth, Western Australia: ANZMA.
- Al Emam, D. (2016, April, 23). Number of medical tourists drops 30% in Q1 of 2016. *The Jordan Times*. Retrieved from <http://www.jordantimes.com/news/local/number-medical-tourists-drops-30-q1-2016>.
- Al Muala, A. (2011). Determinant factors of tourists satisfaction in Muslim's countries: A Structural Equation Model (SEM). *American Academic and Scholarly Research Journal*, 1(1), 21-28.
- Al Muala, A. M., Mat, N. K. N., & Isa, F. M. (2013). Assessing actual visit behavior through antecedents of tourists satisfaction among international tourists in Jordan: A Structural Equation Modeling (Sem) approach. *ASEAN Marketing Journal*, 3(1), 21-34.
- Alabdallat, M. (2015, July 8). Medical tourism in Jordan, a rich past and an unknown future. Retrieved from <https://www.linkedin.com/pulse/medical-tourism-jordan-rich-past-unknown-future-alabdallat-ph-d-usa>.
- Alafi, K. K. (2014). Developing world: increasing Jordanian tourism: A strategic plan. *Journal of Management Research*, 6(1), 192-210.
- Al-Azzam, A. F. M. (2016). A study of the impact of marketing mix for attracting medical tourism in Jordan. *International Journal of Marketing Studies*, 8(1), 139-149.

- Al-Azzam, A. F., & Azzam, Z. (2013). Evaluating the impact of service quality, brand image, trust and promotion on customer loyalty in mobile phone in Jordan. *Zarqa Journal for Research and Studies in Humanities*, 13(2), 263-272.
- Al-Azzam, F. (2013). Analysis of the antecedents of customer-based brand equity and its application to multiple destinations. *Interdisciplinary Journal of Contemporary Research in Business*, 5(5), 71-90.
- Al-Azzam, F., & Khanfar, I. A. (2015). Antecedent and mediator of destination brand loyalty amongst international tourists in Jordan. *International Journal of Marketing, Financial Services and Management Research*, 3(6), 212-229.
- Al-Hawary, S. I. S., & Aldaihani, F. M. F. (2016). Customer relationship management and innovation capabilities of Kuwait Airways. *International Journal of Academic Research in Economics and Management Sciences*, 5(4), 201-226.
- Aliman, N. K., & Mohamad, W. N. (2013). Perceptions of service quality and behavioral intentions: A mediation effect of patient satisfaction in the private health care in Malaysia. *International Journal of Marketing Studies*, 5(4), 15-29.
- Alipour, M., & Mohammadi, M. H. (2011). The effect of customer relationship management (CRM) on achieving competitive advantage of manufacturing tractor. *Global Journal of Business and Management Research*, 11(5), 26-36.

- Al-Khalil, S. S., Dahiyat, S. E., & Al-Dalahmeh, M. A. (2014). Intellectual capital development and its effect on technical innovation in banks operating in Jordan. *Journal of Management Research*, 6(1), 211-238.
- Al-Maaitah, H. (2016). *An investigation of the acquisition and experience of medical tourism: The case of Jordan*. (Unpublished doctoral thesis). University of Exeter, UK.
- Al-Majali, M. M. (2012). International tourists satisfaction: Case of Jordan. *International Business Research*, 5(9), 210-216.
- Al-Meshal, S., & Al-Motairi, M. A. (2013). The impact of relationship quality and franchisee credibility on e-CRM implementation and brand adoption relationship: An empirical study in franchising industry. *International Journal of Managerial Studies and Research*, 2(6), 42-52.
- Almotairi, M. A. (2016). CRM Implementation in Saudi banking sector. *International Business Research*, 10(1), 107-115.
- Aloudat, A. S., & Rawashdeh, A. (2013). Tracking Jordan destination image using the same sample. *International Journal of Marketing Studies*, 5(2), 59-65.
- Al-Rousan, M. R., & Mohamed, B. (2010). Customer loyalty and the impacts of service quality: The case of five star hotels in Jordan. *International Journal of Human and Social Sciences*, 5(13), 886-892.

- Alrubaiee, L., & Alkaa'ida, F. (2011). The mediating effect of patient satisfaction in the patients' perceptions of healthcare quality - patient trust relationship. *International Journal of Marketing Studies*, 3(1), 103-127.
- Al-Share, F. A., & Anagreh, B. (2011). The extent of hospital directors' perception of the concept of marketing mix and its role in activating the health care. "A field study on the Jordanian public hospitals in the governorate of Irbid". *Interdisciplinary Journal of Contemporary Research in Business*, 3(8), 741-768.
- Altaf, M., Iqbal, N., Mohd. Mokhtar, S. S., & Sial, M. H. (2017). Managing consumer-based brand equity through brand experience in Islamic banking. *Journal of Islamic Marketing*, 8(2), 218-242.
- Amin, M., Isa, Z., & Fontaine, R. (2013). Islamic banks: Contrasting the drivers of customer satisfaction on image, trust, and loyalty of Muslim and non-Muslim customers in Malaysia. *International Journal of Bank Marketing*, 31(2), 79-97.
- Amir, M., Yousof, H., & Asma, E. (2014). The effect of using customer relationship management system on customer loyalty case study: Ansar bank's branches in East Azarbaijan. *Indian Journal of Scientific Research*, 8(1), 98-106.
- Amoako, G., Arthur, E., Bandoh, C., & Katah, R. (2012). The impact of effective customer relationship management (CRM) on repurchase: A case study of (GOLDEN TULIP) hotel (ACCRA-GHANA). *African Journal of Marketing Management*, 4(1), 17-29.

- Anastasi, A. (1988). *Psychological testing*. New York, NY: MacMillan Publishing Company.
- Angamuthu, B. (2015). Impact of customer relationship management on customer satisfaction and its role towards customer loyalty and retention practices in the hotel sector. *Journal of Management Research*, 7(1), 43-52.
- Ansary, A., & Hashim, N. M. H. N. (2017). Brand image and equity: The mediating role of brand equity drivers and moderating effects of product type and word of mouth. *Review of Managerial Science*, 1-34.
- Anselmsson, J., Vestman Bondesson, N., & Johansson, U. (2014). Brand image and customers' willingness to pay a price premium for food brands. *Journal of Product and Brand Management*, 23(2), 90-102.
- A-Qader, I. K., Omar, A. B., & Rubel, M. R. B. (2017). The influence of affective brand experience dimension on brand equity of the smartphone millennial users in Malaysia. *Management*, 5(1), 25-37.
- Araújo, T. R. D., & Jugend, D. (2016). Integration efforts in radical and incremental projects of new product development based on biodiversity: Case study in a biotechnology company. *Gestão and Produção*, 23(4), 676-688.
- Asare, I. T., & Lei, S. (2017). Investigating the effect of selected marketing efforts in brand equity creation and its cross-cultural invariance in emerging markets. *International Journal of Marketing Studies*, 9(1), 91-108.

- Ashraf, G., Kadir, S. A., Pihie, Z. A. L., & Rashid, A. M. (2014). Relationship between organizational innovativeness types and organizational effectiveness in private Universities in Iran. *Journal of Studies in Education*, 4(1), 142-153.
- Aspizain, C. (2016). The effects of service quality and corporate rebranding on brand image, customer satisfaction, brand equity and customer loyalty: Study in advertising company at tvOne. *Russian Journal of Agricultural and Socio-Economic Sciences*, 60(12), 118-126.
- Ata, U. Z., & Toker, A. (2012). The effect of customer relationship management adoption in business-to-business markets. *Journal of Business and Industrial Marketing*, 27(6), 497-507.
- Atalay, M., Anafarta, N., & Sarvan, F. (2013). The relationship between innovation and firm performance: An empirical evidence from Turkish automotive supplier industry. *Procedia - Social and Behavioral Sciences*, 75, 226-235.
- Atashfaraz, M., & Abadi, M. H. H. S. (2016). Impact of E-service innovation on brand equality and customer loyalty in Samsung International Corporation. *Procedia Economics and Finance*, 36, 327-335.
- Atilgan, E., Aksoy, Ş., & Akinci, S. (2005). Determinants of the brand equity: A verification approach in the beverage industry in Turkey. *Marketing Intelligence and Planning*, 23(3), 237-248.

- Avraham, E., & Ketter, E. (2016). *Tourism marketing for developing countries: Battling stereotypes and crises in Asia, Africa and the Middle East*. New York, NY: Palgrave Macmillan.
- Awang, Z. (2014). *A handbook on SEM for academicians and practitioners: The step by step practical guides for the beginners*. Selangor: MPWS Rich Resources.
- Awang, Z. (2012). *Research methodology and data analysis*. Shah Alam: Penerbit Universiti Teknologi MARA Press.
- Awang, Z. (2015). *SEM made simple: A gentle approach to learning structural equation modeling*. Selangor: MPWS Rich Resources.
- Awang, Z., Afthanorhan, A., & Mamat, M. (2016). The Likert scale analysis using parametric based Structural Equation Modeling (SEM). *Computational Methods in Social Sciences*, 4(1), 13-21.
- Azadi, R., Yousefi, B., & Eydi, H. (2015). The impact of brand country-of-origin image on the formation of brand equity in the sports apparel industry. *Universal Journal of Industrial and Business Management*, 3(3), 67-73.
- Azizan, N. A., Mohamed, B., Razak, L. T., & Mahkota, B. I. (2013). The effects of perceived service quality on patient satisfaction at a public hospital in state of Pahang. *Asian Journal of Social Sciences and Humanities*, 2(3), 307-323.
- Bakshi, M., Bakshi, M., Mishra, P., & Mishra, P. (2017). Drivers of brand equity of television news channels: Evidences from emerging market. *Marketing Intelligence and Planning*, 35(1), 147-162.

- Baldauf, A., Cravens, K. S., & Binder, G. (2003). Performance consequences of brand equity management: Evidence from organizations in the value chain. *Journal of Product and Brand Management*, 12(4), 220-236.
- Baregheh, A., Rowley, J., & Sambrook, S. (2009). Towards a multidisciplinary definition of innovation. *Management Decision*, 47(8), 1323–1339.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173.
- Battor, M., & Battor, M. (2010). The impact of customer relationship management capability on innovation and performance advantages: Testing a mediated model. *Journal of Marketing Management*, 26(9-10), 842–857.
- Berndt, A., Herbst, F., & Roux, L. (2005). Implementing a customer relationship management program in an emerging market. *Journal of Global Business and Technology*, 1(2), 81-89.
- Berry, L. L. (2000). Cultivating service brand equity. *Journal of the Academy of Marketing Science*, 28(1), 128-137.
- Bessant, J., Lamming, R., Noke, H., & Phillips, W. (2005). Managing innovation beyond the steady state. *Technovation*, 25(12), 1366-1376.

- Bhadu, S. S. (2011). Opportunities and challenges of medical and health tourism—creating a brand of alternative tourism in India. *International Journal of Management and Tourism*, 19(2), 32-41.
- Bhat, S. A., & Darzi, M. A. (2016). Customer relationship management: An approach to competitive advantage in the banking sector by exploring the mediational role of loyalty. *International Journal of Bank Marketing*, 34(3), 388-410.
- Bigliardi, B. (2013). The effect of innovation on financial performance: A research study involving SMEs. *Innovation: Management, Policy and Practice*, 15(2), 245-255.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57-71.
- Blesa, A., & Bigné, E. (2005). The effect of market orientation on dependence and satisfaction in dyadic relationships. *Marketing Intelligence and Planning*, 23(3), 249-265.
- Bloom, N., Draca, M., & Van Reenen, J. (2011). Trade induced technical change? The impact of Chinese imports on innovation, IT and productivity. *National Bureau of Economic Research Working Paper* 16717.
- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2008). *Business research methods: Second European edition*. Maidenhead: McGraw-Hill Higher Education.

- Boateng, I. R. (2014). Effect of customer relationship management on the performance of banking services in Ghana. *Journal of Contemporary Integrative Ideas*, 2(1), 13-25.
- Bollen, K. A. (1995). Structural equation models that are nonlinear in latent variables: A least-squares estimator. *Sociological Methodology*, 25, 223-252.
- Bon, A. T., & Mustafa, E. M. A. (2013). Impact of total quality management on innovation in service organizations: Literature review and new conceptual framework. *Procedia Engineering*, 53, 516-529.
- Bon, A. T., Mustafa, E., & Syamsyul Rakiman, U. (2012). Recent and influential studies on TQM-innovation relationship: A review. *International Journal of Manage. Studies, Statistics and Applied Economics*, 2(2), 147-162.
- Brady, M. K., & Cronin, J. J. (2001). Perceived service conceptualizing approach quality : A hierarchical. *Journal of Marketing*, 65(3), 34-49.
- Budiarti, A., Hawidjojo, A., & Jomahir, D. (2013). Brand equity and customer satisfaction as the mediation of advertisement influence and the service quality to loyalty the passengers of international flight at Garuda Indonesia airlines. *Journal of Business and Management*, 9(2), 1-15.

- Buil, I. B., de Chernatony, L., & Leslie, E. (2010). The effect of advertising and sales promotions on brand equity. In *The 6th Thought Leaders in Brand Management International Conference* (pp.1- 13). Lugano: Università della Svizzera italiana
- Buil, I., Martínez, E., & de Chernatony, L. (2013). The influence of brand equity on consumer responses. *Journal of Consumer Marketing*, 30(1), 62-74.
- Burns, A. C., & Bush, R. F. (2010). *Marketing research*. Upper Saddle River, NJ: Prentice Hall.
- Byrne, B. M. (2013). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. New York, NY: Taylor & Francis Group.
- Byukusenge, E., Munene, J., & Orobia, L. (2016). Knowledge management and business performance: Mediating effect of innovation. *Journal of Business and Management Sciences*, 4(4), 82-92.
- Camisón, C., & Villar-López, A. (2010). An examination of the relationship between manufacturing flexibility and firm performance: The mediating role of innovation. *International Journal of Operations and Production Management*, 30(8), 853–878.
- Camisón, C., & Villar-López, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of Business Research*, 67(1), 2891–2902.

- Carmen, C., & José, G. M. (2008). The role of technological⁶ and organizational innovation in the relation between market orientation and performance in cultural organizations. *European Journal of Innovation Management*, 11(3), 413-434.
- Caruana, A., Morris, M., & Vella, A. (1998). The effect of centralization and formalization on entrepreneurship in export firms. *Journal of Small Business Management*, 36(1), 17-29.
- Carvalho, J., & Chima, F. O. (2014). Applications of structural equation modeling in social sciences research, *American International Journal of Contemporary Research*, 4(1), 6-11.
- Chahal, H. (2010). Two component customer relationship management model for healthcare services. *Managing Service Quality*, 20(4), 343-365.
- Chahal, H., & Bala, M. (2012). Significant components of service brand equity in healthcare sector. *International Journal of Health Care Quality Assurance*, 25(4), 343-362.
- Chahal, H., & Kumari, N. (2011). Evaluating customer relationship dynamics in healthcare sector through indoor patients' judgement. *Management Research Review*, 34(6), 626-648.
- Chakravarty, A. (2011). Evaluation of service quality of hospital outpatient department services. *Medical Journal Armed Forces India*, 67(3), 221-224.

- Chang, C. S., Chen, S. Y., & Lan, Y. T. (2013). Service quality, trust, and patient satisfaction in interpersonal-based medical service encounters. *BMC Health Services Research*, 13(1), 1-11.
- Charanah, J., & Njuguna, R. K. (2015). The effects of promotional mix tools on brand equity among hospitals in Nairobi country. *International Journal of Sales, Retailing and Marketing*, 4(4), 45-51.
- Chattopadhyay, T., Shivani, S., & Krishnan, M. (2010). Marketing mix elements influencing brand equity and brand choice. *Vikalpa*, 35(3), 67-84.
- Chen, C. J., & Huang, J. W. (2009). Strategic human resource practices and innovation performance—the mediating role of knowledge management capacity. *Journal of Business Research*, 62(1), 104-114.
- Chen, H. C., & Green, R. D. (2011). Brand equity, marketing strategy, and consumer income: A hypermarket study. *Journal of Management and Marketing Research*, 8(1), 1-18.
- Chen, J. S., & Ching, K. R. (2007a). The effects of customer relationship management practices and multiple-channels on customer loyalty in financial services. *Asia Pacific Management Review*, 12(3), 171-179.
- Chen, J. S., & Ching, R. K. (2007b). The effects of mobile customer relationship management on customer loyalty: Brand image does matter. In *40th Annual Hawaii International Conference of System Sciences*, (pp. 151b-151b). Hawaii: IEEE Computer Society.

- Chen, J., Liu, Z. C., & Wu, N. Q. (2009). Relationships between organizational learning, innovation and performance: An empirical examination. *International Conference on Information Management, Innovation Management and Industrial Engineering*, 3, 488-492. Xi'an: IEEE.
- Chen, P. C., Chuang, L. M., & Chen, Y. Y. (2016). Examining the effects of service quality and perceived value on the relationship between service innovation and organization performance. *International Journal of Management and Administrative Sciences*, 3(8), 1-10.
- Chen, R. H., Lin, R. J., & Yang, P. C. (2011). The relationships between ecrm, innovation, and customer value-An empirical study. In *IEEE International Summer Conference of Asia Pacific on Business Innovation and Technology Management (APBITM)* (pp. 299-302). Dalian: IEEE.
- Chen, Y. S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business Ethics*, 93(2), 307-319.
- Chien, Y. C. (2013). The influences of brand innovation on customer value: Using double-distal mediators of brand perception and brand equity. *Journal of Global Business Management*, 9(2), 53-70.
- Chitty, B., & Soutar, G. N. (2004). Is the European customer satisfaction index model applicable to tertiary education. In *ANZMAC 2004 Conference Wellington* (pp. 1-7). Wellington: Australian and New Zealand Marketing Academy.

- Cho, H. J., & Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, 26(6), 555-575.
- Cho, W. H., Lee, H., Kim, C., Lee, S., & Choi, K. S. (2004). The impact of visit frequency on the relationship between service quality[†] and outpatient satisfaction: A South Korean study. *Health Services Research*, 39(1), 13-34.
- Choi, K.-S., Lee, H., Kim, C., & Lee, S. (2005). The service quality dimensions and patient satisfaction relationships in South Korea: Comparisons across gender, age and types of service. *Journal of Services Marketing*, 19(3), 140–149.
- Chow, H. W., Ling, G. J., Yen, I. Y., & Hwang, K. P. (2017). Building brand equity through industrial tourism. *Asia Pacific Management Review*, 22(2), 70-79.
- Christodoulides, G., & De Chernatony, L. (2010). Consumer-based brand equity conceptualization and measurement: A literature review. *International Journal of Market Research*, 52(1), 43-66.
- Chun, J. R., & Hong, H. G. (2014). The influencing and influenced factor of the performance of hospital customer relationship management (HCRM) system. *International Journal of Applied Engineering Research*, 9(21), 8389-8398.
- Coakes, J. C., & Ong, C., (2011). *SPSS version 18.0 for windows: Analysis without anguish*. Australia: John Wiley & Sons.

- Coakes, S., & Steed, L. G. (2003). *SPSS: Analysis without anguish, version 11.0, for windows*. Australia: John Wiley & Sons.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128-152.
- Coltman, T. (2007). Can superior CRM capabilities improve performance in banking. *Journal of Financial Services Marketing*, 12(2), 102-114.
- Combs, H. W., Laohasirichaikul, B., & Chaipoo Pirutana, S. (2011). Effective customer relationship management of health care: A study of hospitals in Thailand. *Journal of Management and Marketing Research*, 6, 1-12.
- Connell, J. (2006). Medical tourism: Sea, sun, sand and surgery. *Tourism Management*, 27(6), 1093-1100.
- Connell, J. (2013). Contemporary medical tourism: Conceptualisation, culture and commodification. *Tourism Management*, 34, 1-13.
- Cooper, D. R., & Schindler, P. S. (2003). *Business research methods*. New York, NY: McGraw-Hill.
- Coopey, J., Keegan, O., & Emler, N. (1998). Managers' innovations and the structuration of organizations. *Journal of Management Studies*, 35(3), 263-284.

- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approach* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Croitoru, A. (2012). Schumpeter, JA, 1934 (2008), The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle. *Journal of Comparative Research in Anthropology and Sociology*, 3(2), 137-148.
- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *The Journal of Marketing*, 56(3), 55-68.
- Cronin, J. J., & Taylor, S. a. (1994). SERVPERF versus SERVQUAL ; reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*, 58(1), 125–131.
- D'Costa, A. A., & Colaco, F. X. (2014). Customer relationship management and its strategic application in different businesses. *International Journal of Multidisciplinary Research in Social and Management Sciences*, 2(3), 168-181.
- Dabholkar, P. A., Shepherd, C. D., & Thorpe, D. I. (2000). A comprehensive framework for service quality: An investigation of critical conceptual and measurement issues through a longitudinal study. *Journal of Retailing*, 76(2), 139-173.

- Dabholkar, P. A., Thorpe, D. I., & Rentz, J. O. (1996). A measure of service quality for retail stores: Scale development and validation. *Journal of the Academy of Marketing Science*, 24(1), 3-16.
- d'Agostino, R. B. (1971). An omnibus test of normality for moderate and large size samples. *Biometrika*, 58(2), 341-348.
- Damanpor, F. (1996). Bureaucracy and innovation revisited: Effects of contingency factors, industrial sectors, and innovation characteristics. *The Journal of High Technology Management Research*, 7(2), 149-173.
- Daniel, J. (2011). *Sampling essentials: Practical guidelines for making sampling choices*. Newbury Park, CA: Sage publications.
- Dao, T. T., & Yang, C. H. (2014). The effects of service innovation on customer retention: An integration of customer satisfaction. In *Portland International Conference on Management of Engineering and Technology (PICMET)* (pp. 1958-1965). Kanazawa: IEEE.
- Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of Knowledge Management*, 9(3), 101-115.
- Darroch, J., & McNaughton, R. (2002). Examining the link between knowledge management practices and types of innovation. *Journal of Intellectual Capital*, 3(3), 210-222.
- Das, G., & Mukherjee, S. (2016). A measure of medical tourism destination brand equity. *International Journal of Pharmaceutical and Healthcare Marketing*, 10(1), 104-128.

- Daud, S. B. M. (2017). *Marketing strategies and brand equity in Malaysian SMEs: The role of relationship quality as a mediator*. (Unpublished doctoral thesis). Universiti Utara Malaysia, Malaysia.
- Daud, S. B. M., Ghani, N. H. B. H. A., & Abdullah, S. B. H. (2016). The effect of brand personality on brand equity for SMEs brand. *Journal of Global Business and Social Entrepreneurship*, 3(5), 19-33.
- Daud, S. M., Abdullah, S. H., & Ghani, N. H. H. A. (2017). The influence of packaging on brand equity in Malaysian small and medium enterprises: A conceptual paper. *Journal on Technical and Vocational Education*, 1(2), 89-98.
- Davcik, N. S. (2017). How an unequal intra-firm distribution of dynamic marketing capabilities affect market share. In *12th Global Brand Conference of the Academy of Marketing* (pp. 413-420), Kalmar: Linnaeus University.
- Davcik, N. S., da Silva, R. V., & Hair, J. (2015). Towards a unified theory of brand equity: Conceptualizations, typologies and avenues for future research. *Journal of Product and Brand Management*, 24(1), 3-17.
- Day, G. S. (1994). The of market-drive capabilities organizations. *Journal of Marketing*, 58(4), 37-52.
- Debata, B. R., Patnaik, B., Mahapatra, S. S., & Sree, K. (2015). Interrelations of service quality and service loyalty dimensions in medical tourism: A structural equation modelling approach. *Benchmarking: An International Journal*, 22(1), 18-55.

- Deepa, S., & Chitramani, P. (2016). Impact of relational bonds on retailer equity. *Journal of Contemporary Research in Management*, 11(2), 33-56.
- Dehghanan, H., & Yosefi, R. (2013). The study of relationship management with customer and quality relationship, brand equity (Case study: Rasht Tejarat bank). *Journal of Science and today's world*, 9(2), 1217-1234.
- Delafrouz, N., & Goli, A. (2015). The factors affecting the green brand equity of electronic products: Green marketing. *Cogent Business and Management*, 2(1), 1-12.
- Demo, G., & Rozzett, K. (2013). Customer relationship management scale for the business-to-consumer market: Exploratory and confirmatory validation and models comparison. *International Business Research*, 6(11), 29-42.
- Demo, G., Watanabe, E. A. D. M., Chauvet, D. C. V., & Rozzett, K. (2017). Customer relationship management scale for the b2c market: A cross-cultural comparison. *RAM. Revista de Administração Mackenzie*, 18(3), 42-69.
- Dev, C. S., Agarwal, S., & Erramilli, M. K. (2008). Market-driven hotel brands: Linking market orientation, innovation, and performance. *Hospitality Review*, 26(1), 1-9.
- DeVellis, R. F. (2003). *Scale development: Theory and applications. Applied social research methods series* (2nd ed.). Thousand Oaks, CA: Sage Publications.

- Dhurup, M., Mafini, C., & Dumasi, T. (2014). The impact of packaging, price and brand awareness on brand loyalty: Evidence from the paint retailing industry. *Acta Commercii*, 14(1), 1-9.
- Di Marino, E. (2008). The strategic dimension of destination image: An analysis of the French Riviera image from the Italian tourists' perceptions. In *17th International Tourism and Leisure Symposium* (pp. 1-20). Barcelona.
- Diab, S. M. (2014). Using the competitive dimensions to achieve competitive advantage. A study on Jordanian private hospitals. *International Journal of Academic Research in Business and Social Sciences*, 4(9), 138-150.
- Dib, H., & Alhaddad, A. (2014). The hierarchical relationship between brand equity dimensions. *European Scientific Journal*, 10(28), 183-194.
- Dibrell, C., Craig, J. B., & Neubaum, D. O. (2014). Linking the formal strategic planning process, planning flexibility, and innovativeness to firm performance. *Journal of Business Research*, 67(9), 2000-2007.
- Du Plessis, M. (2007). The role of knowledge management in innovation. *Journal of Knowledge Management*, 11(4), 20-29.
- Dubai Medical Tourism (2016). *In invest in group*. Retrieved on January 11, 2017 from <http://investingroup.org/snapshot/267/dubai-medical-tourism-united-arab-emirates/>.

- Durst, S., Mention, A. L., & Poutanen, P. (2015). Service innovation and its impact: What do we know about?. *Investigaciones Europeas de Dirección y Economía de la Empresa*, 21(2), 65-72.
- Ebeid, A. Y. (2014). Distribution intensity, advertising, monetary promotion, and customer-based brand equity: An applied study in Egypt. *International Journal of Marketing Studies*, 6(4), 113.
- ElKordy, M. (2014). The impact of CRM capability dimensions on organizational performance. *European Journal of Business and Social Sciences*, 2(10), 128-146.
- Emari, H., Jafari, A., & Mogaddam, M. (2012). The mediatory impact of brand loyalty and brand image on brand equity. *African Journal of Business Management*, 6(17), 5692-5701.
- Environments, B., & Agile, F. (2012). *Jordan economic growth assessment*. Retrieved on July 17, 2017 from http://pdf.usaid.gov/pdf_docs/PA00J1T2.pdf.
- Environments, B., & Agile, F. (2013). *Jordan tourism sector assessment : challenges today, opportunities tomorrow*. Retrieved on February 12, 2016 from http://fs8859.0za.in/research_paper/HRIDJR0217_TourismAssessment_En_2013.pdf.
- Erdem, T., & Swait, J. (2016). The Information-economics perspective on brand equity. *Foundations and Trends in Marketing*, 10(1), 1-59.

- Ernst, H., Kahle, H. N., Dubiel, A., Prabhu, J., & Subramaniam, M. (2015). The antecedents and consequences of affordable value innovations for emerging markets. *Journal of Product Innovation Management*, 32(1), 65-79.
- Esmailpour, M., Mohamadi, Z., & Rajabi, A. (2016). Effect of dimensions of service quality on the brand equity in the fast food industry. *Studies in Business and Economics*, 11(3), 30-46.
- Fadzline, P., Nor, N. M., & Mohamad, S. J. A. N. S. (2014). The mediating effect of design innovation between brand distinctiveness and brand performance: Evidence from furniture manufacturing firms in Malaysia. *Procedia-Social and Behavioral Sciences*, 130, 333-339.
- Faircloth, J. B., Capella, L. M., & Alford, B. L. (2001). The effect of brand attitude and brand image on brand equity. *Journal of Marketing Theory and Practice*, 9(3), 61-75.
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. Akron, OH: University of Akron Press.
- Farkouh, M. (2015). *Healthcare resource guide: Jordan*. Retrieved on January 10, 2016 from export.gov/health/healthcarersourceguide/egmain_092005.asp.
- Farquhar, P. H. (1989). Managing brand equity. *Marketing Research*, 1(3), 24-33.
- Fatema, M., Azad, M. A. K., & Masum, A. K. M. (2015). Impact of brand image and brand loyalty in measuring brand equity of Islami Bank Bangladesh Ltd. *Asian Business Review*, 2(1), 42-46.

- Fayrene, C. Y., & Lee, G. C. (2011). Customer-based brand equity: A literature review. *Researchers World*, 2(1), 33-42.
- Fazlzadeh, A., Tabrizi, M. M., & Mahboobi, K. (2011). Customer relationship management in small-medium enterprises: The case of science and technology parks of Iran. *African Journal of Business Management*, 5(15), 6159-6168.
- Fincham, J. E. (2008). Response rates and responsiveness for surveys, standards, and the Journal. *American Journal of Pharmaceutical Education*, 72(2), 1-3.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Foroudi, P., Jin, Z., Gupta, S., Melewar, T. C., & Foroudi, M. M. (2016). Influence of innovation capability and customer experience on reputation and loyalty. *Journal of Business Research*, 69(11), 4882-4889.
- Fozia, R. N., Shiamwama, S. M., & Otiso, K. N. (2014). Impact of customer relationship management as a strategy for competitive advantage in Kenyan public universities: A case study of Moi University. *International Journal of Business, Humanities and Technology*, 4(4), 136-145.
- French, A., & Smith, G. (2013). Measuring brand association strength: A consumer based brand equity approach. *European Journal of Marketing*, 47(8), 1356-1367.

- Friedman, B. (2017). *Increased demand for outpatient surgery as driver for outbound medical tourism*. *Lab soft news*. Retrieved on September 14, 2017, from http://labsoftnews.typepad.com/lab_soft_news/2010/07/increased-demand-for-outpatient-surgery-as-driver-for-outbound-medical-tourism.html.
- Fuentes, C. M. (1999). Measuring hospital service quality: A methodological study. *Managing service quality: An International Journal*, 9(4), 230-240.
- Gadrey J, Gallouj F & Weinstein, O. (1995). New modes of innovation: How services benefit industry. *International Journal of Service Industry Management* 6(3), 4–16.
- Ganesan, S., Brown, S., Mariadoss, B. and Ho, H. (2010), "Buffering and amplifying effects of relationship commitment in business-to-business relationships". *Journal of Marketing Research*, 47(2), 361-373.
- García-Morales, V. J., Lloréns-Montes, F. J., & Verdú-Jover, A. J. (2007). Influence of personal mastery on organizational performance through organizational learning and innovation in large firms[†] and SMEs. *Technovation*, 27(9), 547–568.

- Garcia-Morales, V. J., Matias-Reche, F., & Hurtado-Torres, N. (2008). Influence of transformational leadership on organizational innovation and performance depending on the level of organizational learning in the pharmaceutical sector. *Journal of Organizational Change Management*, 21(2), 188-212.
- Gault, F. (2014). *Where are innovation indicators, and their applications, going?* (No. 055). United Nations University-Maastricht Economic and Social Research Institute on Innovation and Technology (MERIT).
- Ghafari, P., Karjalian, R., & Mashayekhnia, A. (2011). Studying the relationship between different dimensions of CRM and innovation capabilities in Melli bank of Iran. *World Academy of Science, Engineering and Technology*, 5(12), 906-910.
- Ghahfarokhi, A. D., & Zakaria, M. S. (2009). The impact of CRM on customer retention in Malaysia. In *International Conference on Electrical Engineering and Informatics, (ICEEI'09)*, 2, 309-313. Selangor: IEEE.
- Ghani, N. H. A. (2012). Managing knowledge: The role of market orientation towards branding in the automobile authorized independent dealers. *International Journal of Innovation, Management and Technology*, 3(4), 300-305.
- Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology and Metabolism*, 10(2), 486-489.

- Ghazian, A., Hossaini, M. H., & Farsijani, H. (2016). The effect of customer relationship management and its significant relationship by customers' reactions in LG company. *Procedia Economics and Finance*, 36, 42-50.
- Gheysari, K., & Bemani, A. (2013). Assessing CRM indicators effects on creating brand image at health care services. *Reef Resources Assessment and Management Technical Paper*, 38(2), 370-376.
- Gholami, S. (2017). The impact of customer relationship on brand equity. *International Journal of Applied Business and Economic Research*, 15(5), 551-577.
- Gill, M. S., & Dawra, J. (2010). Evaluating Aaker's sources of brand equity and the mediating role of brand image. *Journal of Targeting, Measurement and Analysis for Marketing*, 18(3-4), 189-198.
- Girard, T., Trapp, P., Pinar, M., Gulsoy, T., & Boyt, T. E. (2017). Consumer-based brand equity of a private-label brand: Measuring and examining determinants. *Journal of Marketing Theory and Practice*, 25(1), 39-56.
- Giroux, M., Giroux, M., Pons, F., Pons, F., Maltese, L., & Maltese, L. (2017). The role of perceived brand personality in promotion effectiveness and brand equity development of professional sports teams. *International Journal of Sports Marketing and Sponsorship*, 18(2), 180-195.

- Grace, D., & O'Cass, A. (2004). Examining service experiences and post-consumption evaluations. *Journal of Services Marketing*, 18(6), 450-461.
- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *Milbank Quarterly*, 82(4), 581-629.
- Grekova, K., Bremmers, H. J., Trienekens, J. H., Kemp, R. G. M., & Omta, S. W. F. (2013). The mediating role of environmental innovation in the relationship between environmental management and firm performance in a multi-stakeholder environment. *Journal on Chain and Network Science*, 13(2), 119-137.
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.
- Guceri-Ucar, G., & Koch, S. (2014). Adding value to service brands through innovation: A framework for emerging economies. In A. Goyal (Ed.), *Innovations in Services Marketing and Management: Strategies for Emerging Economies: Strategies for Emerging Economies* (pp. 148-169). Hershey, PA: Business Science Reference.
- Guiry, M., Scott, J. J., & Vequist IV, D. G. (2013). Experienced and potential medical tourists' service quality expectations. *International Journal of Health Care Quality Assurance*, 26(5), 433-446.
- Gul, M. S., Jan, F. A., Baloch, Q. B., Jan, M. F., & Jan, M. F. (2010). Brand image and brand loyalty. *Journal of Social Sciences*, 3(1), 55-74.

- Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. *International Journal of Production Economics*, 133(2), 662-676.
- Ha, H. Y. (2009). Effects of two types of service quality on brand equity in China: The moderating roles of satisfaction, brand associations, and brand loyalty. *Seoul Journal of Business*, 15(2), 59-83.
- Hair, J. F., Black, W. C., Babin, B. J. BJ., & Anderson, RE. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Education.
- Hakim, L., & Susanti, N. (2017). Influence of customer relationship management, brand equity, perceived product quality, perceived price on customer value and purchase intention (Studies Philips light bulb in Batam). *International Journal of Economics and Finance*, 9(7), 122-131.
- Hakimi, W. B., Triki, A., & Hammami, S. M. (2014). Developing a customer knowledge-based measure for innovation management. *European Journal of Innovation Management*, 17(3), 349-374.
- Hakkak, M., Esmaeili, M., & Mirzaei, M. (2012). An investigation on role of customer relationship management (CRM) in increasing organizational effectiveness. *Management Science Letters*, 2(8), 2827-2832.
- Hami, N., Muhamad, M. R., & Ebrahim, Z. (2015). The impact of sustainable manufacturing practices and innovation performance on economic sustainability. *Procedia CIRP*, 26, 190-195.

- Han, H., & Hyun, S. S. (2015). Customer retention in the medical tourism industry: Impact of quality, satisfaction, trust, and price reasonableness. *Tourism Management*, 46, 20-29.
- Han, S., & Baek, S. (2004). Antecedents and consequences of service quality in online banking: an application of the SERVQUAL instrument. *Advances in Consumer Research*, 31(2), 208-14.
- Hanaysha, J. (2016a). Restaurant location and price fairness as key determinants of brand equity: A study on fast food restaurant industry. *Business and Economic Research*, 6(1), 310-323.
- Hanaysha, J. (2016b). Testing the effect of service quality on brand equity of automotive industry: Empirical insights from Malaysia. *Global Business Review*, 17(5), 1060-1072.
- Hanaysha, J. R. M. (2015). The effect of strategic factors and the role of relationship quality as mediator on brand equity of automotive industry. (Unpublished doctoral thesis). Universiti Utara Malaysia, Malaysia.
- Hanaysha, J., & Hilman, H. (2015a). Advertising and country of origin as key success factors for creating sustainable brand equity. *Journal of Asian Business Strategy*, 5(7), 2225–4226.
- Hanaysha, J., & Hilman, H. (2015b). Product innovation as a key success factor to build sustainable brand equity. *Management Science Letters*, 5(6), 567–576.

- Hanaysha, J., & Hilman, H. (2015c). Strategic effects of product innovation, service quality, and relationship quality on brand equity. *Asian Social Science*, 11(10), 56–72.
- Hanaysha, J., Hilman, H., & Abdul-Ghani, N. H. (2014). Direct and indirect effects of product innovation and product quality on brand image: Empirical evidence from automotive industry. *International Journal of Scientific and Research Publications*, 4(11), 1-7.
- Hanaysha, J., Hilman, H., Ghani, A., & Hasmini, N. (2013). Assessing the literature on brand equity: from past, present to future. *Australian Journal of Basic and Applied Sciences*, 7(14), 488-499.
- Hansen, M. H., Hurwitz, W. N., & Madow, W. G. (1953). *Sample survey methods and theory*. New York, NY: Wiley & Sons.
- Hapsari, R., Clemes, M. D., & Dean, D. (2017). The impact of service quality, customer engagement and selected marketing constructs on airline passenger loyalty. *International Journal of Quality and Service Sciences*, 9(1), 21-40.
- Harahsheh, S. S. (2009). *An evaluation of the image of the Hashemite Kingdom of Jordan in the British and Swedish markets and the implications for marketing the country as a tourism destination*. (Unpublished doctoral thesis). Bournemouth University, UK.
- Harkema, S. (2003). A complex adaptive perspective on learning within innovation projects. *The Learning Organization*, 10(6), 340-346.

- Haryanto, A. T., & Haryono, T. (2015). The influence of market orientation on innovation type and enterprise performance. *Polish Journal of Management Studies*, 11(1), 68-78.
- Hashem, T. N. (2011). The impact of customer relationship marketing on costumer's image for Jordanian five star hotels. *Journal of Academic Research in Economics*, 3(3), 367-376.
- Hashem, T. N. (2012). The impact of customer relationship marketing on customers' satisfaction for the banking industry in Jordan. *International Journal of Management Cases*, 14(4), 142-153.
- Hassan, M. U., Shaukat, S., Nawaz, M. S., & Naz, S. (2013). Effects of innovation types on firm performance: An empirical study on Pakistan's manufacturing sector. *Pakistan Journal of Commerce and Social Sciences*, 7(2), 243-262.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420.
- Health Care Financing Administration, 42 C.F.R. & 440.30 (1997). Retrieved on August 5, 2017 from <https://www.gpo.gov/fdsys/pkg/CFR-2016-title42-vol4/xml/CFR-2016-title42-vol4-part440.xml#seqnum440.30>.
- Heiman, G. (1998). *Understanding research methods and statistics: An integrated introduction for psychology*. Boston, MA: Houghton Mifflin.

- Henard, D. H., & Dacin, P. A. (2010). Reputation for product innovation: Its impact on consumers. *Journal of Product Innovation Management*, 27(3), 321-335.
- Hendricks, K. B., Singhal, V. R., & Stratman, J. K. (2007). The impact of enterprise systems on corporate performance: A study of ERP, SCM, and CRM system implementations. *Journal of Operations Management*, 25(1), 65-82.
- Hepola, J., Karjaluo, H., & Hintikka, A. (2017). The effect of sensory brand experience and involvement on brand equity directly and indirectly through consumer brand engagement. *Journal of Product and Brand Management*, 26(3), 282-293.
- Herstein, R., Drori, N., Berger, R., & Barnes, B. R. (2017). Exploring the gap between policy and practice in private branding strategy management in an emerging market. *International Marketing Review*, 34(4), 559-578.
- Hinkin, T. R., Tracey, J. B., & Enz, C. A. (1997). Scale construction: Developing reliable and valid measurement instruments. *Journal of Hospitality and Tourism Research*, 21(1), 100-120.
- Ho, L. A. (2011). Meditation, learning, organizational innovation and performance. *Industrial Management and Data Systems*, 111(1), 113-131.
- Hoe, S. L. (2008). Issues and procedures in adopting structural equation modeling technique. *Journal of Applied Quantitative Methods*, 3(1), 76-83.

- Holtzman, S., & Vezzu, S. (2011). Confirmatory factor analysis and structural equation modeling of noncognitive assessments using PROC CALIS. *Proceeding of the NorthEast SAS Users Group (NESUG)* (pp. 11-14). Maine, Portland. Retrieved from <https://www.lexjansen.com/nesug/nesug11/sa/sa07.pdf>.
- Horng, J. S., Liu, C. H., Chou, H. Y., & Tsai, C. Y. (2012). Understanding the impact of culinary brand equity and destination familiarity on travel intentions. *Tourism Management*, 33(4), 815-824.
- Hossien, E. (2011). Determinants of brand equity: Offering a model to chocolate industry. *World Academy of Science, Engineering and Technology, International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 5(11), 1483-1491.
- Hu, H. H., Hu, H. Y., & Parsa, H. (2015). Customer relationship management and innovation as performance drivers. In *Portland International Conference on Management of Engineering and Technology (PICMET)*, (pp. 835-841). Portland: IEEE.
- Hu, L. T., Bentler, P. M., & Kano, Y. (1992). Can test statistics in covariance structure analysis be trusted?. *Psychological Bulletin*, 112(2), 351-362.
- Hu, Y. J. (2011). How brand equity, marketing mix strategy and service quality affect customer loyalty: The case of retail chain stores in Taiwan. *The International Journal of Organizational Innovation*, 4(1), 59-73.

- Huang, H. C., & Chang, C. W. (2008). Embedded ties and the acquisition of competitive advantage. *Journal of Intellectual Capital*, 9(1), 105-121.
- Hung, S. Y., Hung, W. H., Tsai, C. A., & Jiang, S. C. (2010). Critical factors of hospital adoption on CRM system: Organizational and information system perspectives. *Decision Support Systems*, 48(4), 592-603.
- Hussain, M., Munir, A., & Siddiqui, M. (2012). Impact of innovation in FMCG products on customer loyalty and satisfaction: A case study of confectionary producer "English biscuit manufacturers" in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 4(8), 423-431.
- Ile, F., & Tigau, G. (2017). Medical tourism market trends – an exploratory research. *Proceedings of the International Conference on Business Excellence*, 11(1), 1111-1121, Bucharest: De Gruyter Open.
- International Medical Travel Journal (2016a). *40% drop in medical tourism numbers to Jordan*. Retrieved on March 07, 2016 from <https://www.imtj.com/news/40-drop-medical-tourism-numbers-jordan/>.

- International Medical Travel Journal (2016b). *Medical tourism: Facts and figures*. Retrieved on March 07, 2016 from <http://www.imtj.com/medical-tourism-association/?country/SG/Medical20%toursim>.
- Irshad, N., & Irshad, W. (2012). Service based brand equity, measure of purchase intention, mediating role of brand performance. *Academy of Contemporary Research Journal*, 1(1), 1-10.
- Isa, S. M., Kiumarsi, S., & Neoh, B, P. (2017). The effect of innovations to brand equity: the role of customers satisfaction on postal service. *Problems and Perspectives in Management*, 13(2), 347-356.
- Iyah, M. (2016). The effect of customer relationship management and quality of service perceived, image and implication on customer trust to choose hotel star four and five in Dki Jakarta. *Competence-Journal of Business Management*, 11(2), 141-166.
- Izadi, M., Saadat, S. H., Ayoubian, A., Dehaghi, Z. H., Karbasi, M. R., & Jalali, A. R. (2014). Health tourism in Iran; identifying obstacles for development of this industry. *International Journal of Travel Medicine and Global Health*, 1(2), 89-94.
- Jaelani, E. (2016). The effect of customer relationship management toward product innovation at football distro in Bandung. In *International Conference on Cyber and IT Service Management* (pp. 1-5). Bandung: IEEE.

- Jahanzeb, S., Fatima, T., & Mohsin Butt, M. (2013). How service quality influences brand equity: The dual mediating role of perceived value and corporate credibility. *International Journal of Bank Marketing*, 31(2), 126-141.
- Jalali, S. M., & Sardari, M. (2015). Study the effect of different aspects of customer relationship management (CRM) on innovation capabilities with mediator role of knowledge management (Case study: Mahram company). *Mediterranean Journal of Social Sciences*, 6(6 S6), 343-360.
- Jalkala, A., & Salminen, R. T. (2008). Reference-oriented marketing approach: Building, managing, and utilizing reference customer relationship portfolios. *IMP2008 Uppsala Conference* (pp. 1-18). Uppsala: Uppsala University.
- Jiang, J. J., Klein, G., Parolia, N., & Li, Y. (2012). An analysis of three SERVQUAL variations in measuring information system service quality. *Electronic Journal Information Systems Evaluation Volume*, 15(2), 149-162.
- Johnson, M. D., Herrmann, A., & Huber, F. (2006). The evolution of loyalty intentions. *Journal of Marketing*, 70(2), 122-132.
- Jotikasthira, N. (2010). *Salient factors influencing medical tourism destination choice*. DBA thesis, Southern Cross University, Lismore, Australia.

- Jussem, P. M., Chan, V. S. L., Chung, E. S. M., & Kibat, S. A. (2016). Linking service quality to tourist satisfaction in Pulau Satang Besar. *Tourism, Leisure and Global Change*, 1(1), 147-156.
- Kant, R., Kant, R., Jaiswal, D., & Jaiswal, D. (2017). The impact of perceived service quality dimensions on customer satisfaction: An empirical study on public sector banks in India. *International Journal of Bank Marketing*, 35(3), 411-430.
- Karahan, M., & Kuzu, Ö. H. (2014). Evaluating of CRM in banking sector: A case study on employees of banks in Konya. *Procedia - Social and Behavioral Sciences*, 109, 6–10.
- Karunanithy, M., & Sivesan, S. (2013). An empirical study on the promotional mix and brand equity: Mobile service providers. *Industrial Engineering Letters*, 3(3), 1-9.
- Kasim, A., & Minai, B. (2009). Linking CRM strategy, customer performance measures and performance in the hotel industry. *International Journal of Economics and Management*, 3(2), 297-316.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *The Journal of Marketing*, 57(1), 1-22.
- Keller, K. L. (2003). Brand synthesis: The multidimensionality of brand knowledge. *Journal of Consumer Research*, 29(4), 595-600.
- Keller, K. L. (2013). *Strategic brand management: Building, measuring, and managing brand equity* (4th ed., Global ed.). Harlow: Pearson Prentice Hall.

- Keller, K. L., & Lehmann, D. R. (2006). Brands and branding: Research findings and future priorities. *Marketing Science*, 25(6), 740-759.
- Keramati, A., & Nili, A. (2011). A proposal framework for investigating the impact of customer relationship management on customer retention in e-commerce. *Human Resources*, 6(9), 669-674.
- Kesuma, I. A. W., Hadiwidjojo, D., Wiagustini, N. L. P., & Rohman, F. (2013). Service quality influence on patient loyalty: Customer relationship management as mediation variable (Study on private hospital industry in Denpasar). *International Journal of Business and Commerce*, 2(12), 1-14.
- Khalafinezhad, R., & Long, C. S. (2013). Customer satisfaction and loyalty: A review in the perspective of CRM. *Sains Humanika*, 64(2), 61-66.
- Khammash, T. (2012). *The Jordanian health sector report 2012*. Retrieved on May 12, 2014 from <http://jordinvest.com.jo/uploads/documents/health-sector-report-09-09-2012.pdf>.
- Khan, N., Salam, S., & Sherpao, A. (2014). Impact of innovation on customer satisfaction and brand loyalty: A case study of professionals. *International Journal of Management Sciences*, 3(9), 663-672.
- Khan, S., & Alam, M. S. (2014). Kingdom of Saudi Arabia: A potential destination for medical tourism. *Journal of Taibah University Medical Sciences*, 9(4), 257-262.

- Khine, M. S. (Ed.). (2013). *Application of structural equation modeling in educational research and practice*. Rotterdam: Sense Publishers.
- Khodabakhshi, F., Kamali, N., & Shiargar, M. (2013). The Impact of Knowledge management on innovation with the mediating role of empowerment. *Life Science Journal*, 10(2), 1385-1390.
- Kim, H. B., & Kim, W. G. (2005). The relationship between brand equity and firms' performance in luxury hotels and chain restaurants. *Tourism Management*, 26(4), 549-560.
- Kim, H. B., Gon Kim, W., & An, J. A. (2003). The effect of consumer-based brand equity on firms' financial performance. *Journal of Consumer Marketing*, 20(4), 335-351.
- Kim, H. S. (2012). How CRM strategy impacts organizational performance: Perspective of customer equity drivers. *Journal of Database Marketing and Customer Strategy Management*, 19(4), 233-244.
- Kim, H. Y. (2013). Statistical notes for clinical researchers: Assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry and Endodontics*, 38(1), 52-54.
- Kim, K. H., Kim, K. S., Kim, D. Y., Kim, J. H., & Kang, S. H. (2008). Brand equity in hospital marketing. *Journal of Business Research*, 61(1), 75-82.
- Kim, S. H., & Huarng, K. H. (2011). Winning strategies for innovation and high-technology products management. *Journal of Business Research*, 64(11), 1147-1150.

- Kim, W. G., & Kim, H. B. (2004). Measuring customer-based restaurant brand equity. *The Cornell Hotel and Restaurant Administration Quarterly*, 45(2), 115–131.
- King, C. (2017). Brand management—standing out from the crowd: A review and research agenda for hospitality management. *International Journal of Contemporary Hospitality Management*, 29(1), 115-140.
- Kinnear, T., & Taylor, J. (1991). *Marketing research: An applied approach* (4th ed.). New York, NY: McGraw-Hill.
- Kirmaci, S. (2012). Customer relationship management and customer loyalty; a survey in the sector of banking. *International Journal of Business and Social Science*, 3(3), 282-291.
- Kiumarsi, S., Isa, S. M., & Jayaraman, K. (2015). Determinants of service quality on service loyalty: The mediating role of customers' satisfaction and brand equity. *Problems and Perspectives in Management*, 13(2), 347-356.
- Kiumarsi, S., Jayaraman, K., & Isa, S. M. (2015). Service quality and innovation in Malaysian post offices: An empirical study. *Global Business and Organizational Excellence*, 35(1), 55-66.
- Kline, R.B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York, NT: The Guilford Press.
- Ko, C. H. (2017). Exploring the relationship of different components of brand equity in hotel industry through social networking sites. *International Journal of Organizational Innovation*, 9(3), 47-55.

- Kolis, K., & Jirinova, K. (2013a). Research of customer-centric approach and involvement of customers into innovation process across Czech SMEs. In *the 7th International Days of Statistics and Economics* (pp. 521-531), Prague, Czech Republic.
- Kolis, K., & Jirinova, K. (2013b). The impact of the customer relationship management on a company's financial performance. In *the 9th European Conference on Management Leadership and Governance (ECMLG)* (pp. 129-135), Klagenfurt: Academic Conferences and Publishing International Limited.
- Kotler, P. (2000). Marketing management, millennium edition. *Marketing Management*, 23(6), 188–193.
- KPMG (2011). *Issues monitor, sharing knowledge on topical issues in the healthcare sector*, vol. 7. Retrieved on December 20, 2014 from <https://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Issues-monitor-pharmaceuticals/Documents/pharmaceuticals.pdf>.
- Krasnikov, A., Jayachandran, S., & Kumar, V. (2009). The impact of customer relationship management implementation on cost and profit efficiencies: evidence from the US commercial banking industry. *Journal of Marketing*, 73(6), 61-76.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.

- Krosnick, J. A. & Fabrigar, L. R. (1997). Designing rating scales for effective measurement in surveys. In *Survey Measurement and Process Quality*, (pp. 141-164). Hoboken, NJ: John Wiley & Sons.
- Kumar, V., Sunder, S., & Ramaseshan, B. (2011). Analyzing the diffusion of global customer relationship management: A cross-regional modeling framework. *Journal of International Marketing*, 19(1), 23–39.
- Lancioni, R., Smith, M., & Stein, A. (2009). Industrial organization and customer relationship management: The impact on customer service orientation in B-to-B markets. *Journal of Management and Public Policy*, 1(1), 57-88.
- Lämsisalmi, H., Kivimäki, M., Aalto, P., & Ruoranen, R. (2006). Innovation in healthcare: A systematic review of recent research. *Nursing Science Quarterly*, 19(1), 66-72.
- Lassar, W., Mittal, B., & Sharma, A. (1995). Measuring customer-based brand equity. *Journal of Consumer Marketing*, 12(4), 11-19.
- Ledimo, O., & Martins. N. (2015). An exploratory study of service delivery innovation among government employees. In *the 10th European Conference on Innovation and Entrepreneurship* (pp. 408-414). Genoa: Academic Conferences and Publishing International Limited.
- Lee, M., Han, H., & Lockyer, T. (2012). Medical tourism—attracting Japanese tourists for medical tourism experience. *Journal of Travel and Tourism Marketing*, 29(1), 69-86.

- Lee, P. M., Khong, P., & Ghista, D. N. (2006). Impact of deficient healthcare service quality. *The TQM Magazine*, 18(6), 563-571.
- Lee, S. M., Olson, D. L., & Trimi, S. (2012). Co-innovation: Convergenomics, collaboration, and co-creation for organizational values. *Management Decision*, 50(5), 817-831.
- Lehtinen, U., & Lehtinen, J. R. (1991). Two approaches to service quality dimensions. *Service Industries Journal*, 11(3), 287-303.
- Lei, S., & Chu, L. (2015). The mediating role of consumer satisfaction in the relationship between brand equity and brand loyalty based on PLS-SEM model. *International Business Research*, 8(2), 62-70.
- Levy, P. S., & Lemeshow, S. (2013). *Sampling of populations: Methods and applications* (4th ed.). Hoboken, NJ: John Wiley & Sons.
- Liao, Y. K., Wu, W. Y., Amaya Rivas, A. A., & Lin Ju, T. (2017). Cognitive, experiential, and marketing factors mediate the effect of brand personality on brand equity. *Social Behavior and Personality: An International Journal*, 45(1), 1-18.
- Lieberman, M. (2010). *Measure brand equity with structural equations modeling*. Retrieved on 21 June 2017, from <http://www.mvsolution.com/wp-content/uploads/Brand-Equity-Structural-Equations-Model-by-Michael-Lieberman.pdf>.
- Lin, C. Y. Y., & Chen, M. Y. C. (2007). Does innovation lead to performance? An empirical study of SMEs in Taiwan. *Management Research News*, 30(2), 115-132.

- Lin, L. (2013). The impact of service innovation on firm performance. *The Service Industries Journal*, 33(15-16), 1599-1632.
- Lin, L. H. (2004). *A study of innovation and quality in the automotive industry*. (Unpublished doctoral thesis). National Sun Yat-sen University, Taiwan.
- Lin, L. H., & Lu, I. Y. (2006). Process management and technological innovation: An empirical study of the information and electronic industry in Taiwan. *International Journal of Technology Management*, 37(1-2), 178-192.
- Lin, R. J., Chen, R. H., & Chiu, K. K. S. (2010). Customer relationship management and innovation capability: An empirical study. *Industrial Management and Data Systems*, 110(1), 111-133.
- Lindgreen, A., & Chaturvedi, B. (2008). *Relationship marketing: An introduction*. Hyderabad: ICFAI University Press.
- Lingavel, D. (2015). Impact of customer relationship management on brand equity: Private hospitals in Jaffna. *European Journal of Business and Management*, 7(4), 69-80.
- Liu, C. R., Liu, H. K., & Lin, W. R. (2015). Constructing customer-based museums brand equity model: The mediating role of brand value. *International Journal of Tourism Research*, 17(3), 229-238.

- Liu, X., & Xie, Y. (2014). Exploratory innovation, exploitative innovation and firm performance: Moderating effect of organizational structure and slack resources. In *Portland International Conference of Management of Engineering and Technology (PICMET)* (pp. 861-869). Kanazawa: IEEE.
- Long, A. W., & Taipa, M. (2014). An empirical study for measuring information technology department service quality from hospitality's employees in Macau. *Information Technology Journal*, 13(2), 302-309.
- Long, C. S., Khalafinezhad, R., Ismail, W. K. W., & Rasid, S. Z. A. (2013). Impact of CRM factors on customer satisfaction and loyalty. *Asian Social Science*, 9(10), 247-253.
- Loureiro, S. M. C., Loureiro, S. M. C., Kaufmann, H. R., & Kaufmann, H. R. (2017). Advertising and country-of-origin images as sources of brand equity and the moderating role of brand typicality. *Baltic Journal of Management*, 12(2), 153-170.
- Loureiro, S., Filipe, Y., & Pires, A. (2014). Exploring the antecedents of brand equity in service industry. In *the 6th Annual EuroMed Conference of the EuroMed Academy of Business*, (pp. 1419-1432), Estoril: EuroMed Press.
- Lovelock, C. H. (1992). *Managing services: Marketing, operations, and human resources*. Englewood Cliffs, NJ: Prentice-Hall International.
- Lunt, N., Horsfall, D., & Hanefeld, J. (2015). *Handbook on medical tourism and patient mobility*. Cheltenham, UK: Edward Elgar Publishing.

- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological methods*, 7(1), 83-104.
- Mahfooz, Y. (2015). Brand equity-consequence relationship: Evidence from automobile industry. *International Journal of Business and Management*, 10(3), 81-90.
- Makasi, A., Govender, K., & Madzorera, N. (2014). Re-branding and its effects on consumer perceptions: A case study of a Zimbabwean bank. *Mediterranean Journal of Social Sciences*, 5(20), 2582-2588.
- Maklan, S., & Knox, S. (2009). Dynamic capabilities: The missing link in CRM investments. *European Journal of Marketing*, 43(11/12), 1392-1410.
- Malcolm, C. (2015). *Current issues and emerging trends in medical tourism*. Hershey, United States: IGI Global.
- Malhotra, N., Birks, D., & Wills, P. (2012). *Marketing research: An applied approach* (3th ed.). Harlow: Pearson Prentice Hall.
- Malkawi, K. (2015). *Sector leaders highlight potential for further growth in medical tourism*. Amman. Retrieved on June 07, 2015 from <http://www.jordantimes.com/news/local/sector-leaders-highlight-potential-further-growth-medical-tourism>.

- Marin, L., Martín, P. J., & Rubio, A. (2017). Doing good and different! The mediation effect of innovation and investment on the influence of CSR on competitiveness. *Corporate Social Responsibility and Environmental Management*, 24(2), 159-171.
- Marinova, S. T., Cui, J., & Marinov, M. A. (2008). Customer relationships and brand equity in China's banking services. *Revista de Administracao Faces Journal*, 7(3), 11-27.
- Marinova, S., Cui, J., Shiu, E., & Marinov, M. (2012). Impact of customer relationships on brand equity in Chinese retail banking. *Journal of Euromarketing*, 21(1), 37-52.
- Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor models and their invariance across groups. *Psychological Bulletin*, 97(3), 562-582.
- Mazzocchi, M. (2008). *Statistics for marketing and consumer research*. Thousand Oaks, CA: Sage Publications.
- McColl-Kennedy, J. R., Vargo, S. L., Dagger, T. S., Sweeney, J. C., & Van Kasteren, Y. (2012). Health care customer value cocreation practice styles. *Journal of Service Research*, 7(1), 28–40.
- McMillan, J. H. (2000). *Educational research: Fundamentals for the consumer* (3rd ed.). New York, NY: Addison Wesley Longman.
- Medical Tourism Index (2016). *Country Ranking*. Retrieved on December 26, 2016 from <https://www.medicaltourismindex.com/destination/jordan/>.

- Mensah, F. B., & Acquah, I. S. K. (2015). The effect of innovation types on the performance of small and medium sized enterprises in the Sekondi: Takoradi metropolis. *Archives of Business Research*, 3(3), 77-98.
- Ming, T. T., Wei, L. T., Lee, W. S. S., Ong, M. B. F., & Su-Mae, T. (2012). Consumer-based brand equity in the service shop. *International Journal of Marketing Studies*, 4(4), 60-77.
- Ministry of Health (2014). *Annual statistical reports 2005-2014*. Retrieved on April 10, 2015 from <http://www.moh.gov.jo/EN/Pages/Periodic-Newsletters.aspx>.
- Ministry of Health (2015a). *Health sector bodies*. Retrieved on April 04, 2015 from <http://www.moh.gov.jo/EN/HealthSectorBodies/Pages/Private-Hospitals.aspx>.
- Ministry of Health (2015b). *Tourism*. Retrieved on June 07, 2015 from <http://www.moh.gov.jo:81/tourism/mtj.htm>.
- Ministry of Tourism and Antiquities. (2015). *Jordan national tourism strategy*. Retrieved on July 17, 2017 from http://www.mota.gov.jo/Documents/NTS_2011-2015_English.pdf.
- Mirzaei, A., Siuki, H. E., Baumann, C., & Gray, D. (2015). A behavioural brand evaluation typology to measure brand performance over time. *International Journal of Business and Management*, 10(10), 26-34.

- Mithas, S., Krishnan, M. S., & Fornell, C. (2005). Why do customer relationship management applications affect customer satisfaction?. *Journal of Marketing*, 69(4), 201-209.
- Moghaddam, A. K. (2014). Evaluation of banks services quality and its impact on creating brand preference and customers purchase intention. In *Innovative Trends in Multidisciplinary Academic Research (ITMAR)*, 1, 765-780.
- Mohammed, A. A., & Rashid, B. (2012). Customer relationship management (CRM) in hotel industry: A framework proposal on the relationship among CRM dimensions, marketing capabilities, and hotel performance. *International Review of Management and Marketing*, 2(4), 220-230.
- Mohan, B. C., & Sequeira, A. H. (2016). The impact of customer-based brand equity on the operational performance of FMCG companies in India. *IIMB Management Review*, 28(1), 13-19.
- Molinari, L. K., Abratt, R., & Dion, P. (2008). Satisfaction, quality and value and effects on repurchase and positive word-of-mouth behavioral intentions in a B2B services context. *Journal of Services Marketing*, 22(5), 363-373.
- Moradi, H., & Zarei, A. (2011). The Impact of brand equity on purchase intention and brand preference: The moderating effects of country of origin image. *Australian Journal of Basic and Applied Sciences*, 5(3), 539-545.

- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58, 20-38.
- Mostafa, R. H. (2015). The impact of country of origin and country of manufacture of a brand on overall brand equity. *International Journal of Marketing Studies*, 7(2), 70-83.
- Motameni, R., & Shahrokhi, M. (1998). Brand equity valuation: A global perspective. *Journal of Product and Brand management*, 7(4), 275-290.
- Mugdadi, T. M. (2015). The Impact of E-customer relationship management strategy upon sustainable competitive advantage: An empirical investigation in Jordanian banks. *Global Journal of Business Management and Information Technology*, 5(1), 1-14.
- Mukherjee, S., & Shivani, S. (2016). Marketing mix influence on service brand equity and its dimensions. *Vision: The Journal of Business Perspective*, 20(1), 9-23.
- Murphy, P. E., Laczniak, G. R., & Wood, G. (2007). An ethical basis for relationship marketing: A virtue ethics perspective. *European Journal of Marketing*, 41(1/2), 37-57.
- Murtiasih, S., Sucherly, S., & Siringoringo, H. (2014). Impact of country of origin and word of mouth on brand equity. *Marketing Intelligence and Planning*, 32(5), 616-629.

- Mutsikiwa, M., Dhlwayo, K., & Basera, C. H. (2013). The impact of advertising on building brand equity: A case of Zimbabwean universities. *European Journal of Business and Management*, 5(9), 197-210.
- Naghavi, M., Mohamad, Z., & Sambasivan, M. (2012). The mediating role of organizational innovation on the relationship between knowledge management processes and organizational performance in the public sector. In *Knowledge Management International Conference (KMCIe)* (pp. 625-628), Johor Bahru, Malaysia. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.403.4311&rep=rep1&type=pdf>.
- Nanda, N., Kuruvilla, S. J., & Murty, B. V. R. (2013). Role of service innovation in customer satisfaction and customer loyalty: A study on organized retail in India. *International Journal of Business Insights and Transformation*, 6(2), 53-63.
- Naveed, T., Akhtar, I., & Cheema, K. U. R. (2012). The impact of innovation on customer satisfaction and brand loyalty: A study of the students of Faisalabad. *International Journal of Management and Organizational Studies*, 2(2), 62-68.
- Nazari-Shirkouhi, S., Keramati, A., & Rezaie, K. (2015). Investigating the effects of customer relationship management and supplier relationship management on new product development. *Tehnicki Vjesnik*, 22(1), 191-200.

- Nemati, A. R. (2009). Factors determining brand image: A product comparison of proctor and gamble and unilever in Pakistan. *Social Science Research Network*. Retrieved on Dec 15, 2014 from <http://papers.ssrn.com/abstract id 1516214>.
- Nemati, A. R., Khan, K., & Iftikhar, M. (2010). Impact of innovation on customer satisfaction and brand loyalty, a study of mobile phones users in Pakistan. *European Journal of Social Sciences*, 16(2), 299-306.
- Ng, P. F., Butt, M. M., Khong, K. W., & Ong, F. S. (2014). Antecedents of green brand equity: An integrated approach. *Journal of Business Ethics*, 121(2), 203-215.
- Ngai, E. W. T. (2005). Customer relationship management research (1992-2002): An academic literature review and classification. *Marketing Intelligence and Planning*, 23(6), 582-605.
- Ngo, L. V., & O'Cass, A. (2013). Innovation and business success: The mediating role of customer participation. *Journal of Business Research*, 66(8), 1134-1142.
- Nguetsop, M. L., Amoro, G., Wang, Z., & Dacka, M. (2016). An applied study on brand equity: Factors affecting brand equity case study of Mtn telecom Cameroon. *European Journal of Business and Management*, 8(9), 151-170.
- Noor, R. (2013). *Outbound medical tourism from Bangladesh: Problems and solutions*. (Unpublished master thesis). University of Greenwich, London, UK.

- Noree, T. (2015). *The impact of medical tourism on the domestic economy and private health system: A case study of Thailand*. (Unpublished doctoral thesis). University of London, London, UK.
- Noree, T., Hanefeld, J., & Smith, R. (2014). UK medical tourists in Thailand: They are not who you think they are. *Globalization and Health*, 10(1), 29-35.
- Nørskov, S., Chrysochou, P., & Milenkova, M. (2015). The impact of product innovation attributes on brand equity. *Journal of Consumer Marketing*, 32(4), 245-254.
- Nowels, D., & Kamerow, D. B. (2017). New “Core Quality Measures”: Only a beginning. *The Journal of the American Board of Family Medicine*, 30(1), 4-7.
- Ntale, P. D., & Ngoma, M. (2013). Relationship marketing, word of mouth communication and consumer loyalty in the Ugandan mobile telecommunication industry. *African Journal of Business Management*, 7(5), 354-359.
- Nyadzayo, M. W., & Khajehzadeh, S. (2016). The antecedents of customer loyalty: A moderated mediation model of customer relationship management quality and brand image. *Journal of Retailing and Consumer Services*, 30, 262-270.
- O’Cass, A., & Sok, P. (2013). Exploring innovation driven value creation in B2B service firms: The roles of the manager, employees, and customers in value creation. *Journal of Business Research*, 66(8), 1074–1084.

- OECD Oslo Manual (2005), *The measurement of scientific and technological activities. Guidelines for collecting and interpreting innovation data* (3rd ed.). Paris : Organization for Economic Co-operation and Development Eurostat (OECD).
- Oliver, R. L. (1977). Effect of expectation and disconfirmation on postexposure product evaluations: An alternative interpretation. *Journal of Applied Psychology*, 62(4), 480-486.
- Oliver, R. L. (1999). Whence consumer loyalty?. *The Journal of Marketing*, 63, 33-44.
- Oly Ndubisi, N., & Agarwal, J. (2014). Quality performance of SMEs in a developing economy: Direct and indirect effects of service innovation and entrepreneurial orientation. *Journal of Business and Industrial Marketing*, 29(6), 454-468.
- Omachonu, V. K., & Einspruch, N. G. (2010). Innovation in healthcare delivery systems: A conceptual framework. *The Innovation Journal: The Public Sector Innovation Journal*, 15(1), 1-20.
- Omachonu, V. K., & Ross, J. E. (1994). Principles of total quality. *Journal for Healthcare Quality*, 16(6), 36-38.
- Opuni, F. F., Gyamfi, A. K., & Gyimh, R. A. (2014). An empirical study on the causality relationship between innovation and branding in the hospitality industry of Ghana: A financial performance perspective. *International Journal of Business Management and Research*, 4(3), 127-144.

- Orel, F. D., & Kara, A. (2014). Supermarket self-checkout service quality, customer satisfaction, and loyalty: Empirical evidence from an emerging market. *Journal of Retailing and Consumer Services*, 21(2), 118-129.
- Osman, Z., & Sentosa, I. (2013). Influence of customer satisfaction on service quality and trust relationship in Malaysian rural tourism. *Business Management Quarterly Review*, 4(2), 12-25.
- Osta, I. (2015). *USAID's economic growth*. Retrieved on June 03, 2015 from <https://www.usaid.gov/jordan/press-releases/may-13-2015-program-promote-jordan-destination-international-conferences>.
- Ouschan, R., Sweeney, J., & Johnson, L. (2006). Customer empowerment and relationship outcomes in healthcare consultations. *European Journal of Marketing*, 40(9/10), 1068-1086.
- Oxford Business Group (2017). *The Report: Jordan 2016: Tourism*. Retrieved on September 14, 2017, from <https://www.oxfordbusinessgroup.com/node/913859/reader>.
- Paci, P., & Wagstaff, A. (1993). Equity and efficiency in Italian health care. *Health Economics*, 2(1), 15-29.
- Padma, P. (2013). Antecedents of customer loyalty in medical tourism (Working Paper No. 13/03). Lisbon: Instituto Universitário de Lisboa. Retrieved from https://www.researchgate.net/publication/270579932_Antecedents_of_customer_loyalty_in_medical_tourism.

- Pallant, J. (2005). *SPSS survival manual: A step by step guide to data analysis using SPSS for windows (Version 12)* (2nd ed.). Crows Nest, Australia: Allen & Unwin.
- Palmatier, R. W. (2008). *Relationship marketing*. Cambridge, MA: Marketing Science Institute.
- Palmer, A J (1997). "Defining Relationship Marketing: An International Perspective," *Management Decision*, 35(4), 319-321.
- Panda, R. K., & Misra, S. (2014). Impact of country-of-origin image on brand equity: A study on durable products in India. *Procedia-Social and Behavioral Sciences*, 150, 494-499.
- Pandey, R., & Verma, M. R. (2008). Samples allocation in different Strata for impact evaluation of developmental programme. *Rev. Mat. Estat*, 26(4), 103-112.
- Pappu, R., & Quester, P. (2016). Brand innovativeness effects on perceived quality, satisfaction and loyalty. In *Looking Forward, Looking Back: Drawing on the Past to Shape the Future of Marketing* (pp. 763-763). Cham, Switzerland: Springer International Publishing.
- Pappu, R., Quester, P. G., & Cooksey, R. W. (2005). Consumer-based brand equity: improving the measurement-empirical evidence. *Journal of Product and Brand Management*, 14(3), 143-154.
- Parasuraman, A, Zeithaml, V. A, & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perc. *Journal of Retailing*, 64(1), 12-22.

- Parasuraman, A. (2010). Service productivity, quality and innovation: Implications for service-design practice and research. *International Journal of Quality and Service Sciences*, 2(3), 277-286.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, 49(9), 41-50.
- Parvatiyar, A., & Sheth, J. N. (2001). Customer relationship management: Emerging practice, process, and discipline. *Journal of Economic and Social research*, 3(2), 1-34.
- Pekovic, S., & Galia, F. (2009). From quality to innovation: Evidence from two French Employer Surveys. *Technovation*, 29(12), 829-842.
- Piazza, T. (2010). Fundamentals of applied sampling. In *Handbook of survey research*, (2nd ed., pp. 139-168). Bingley, UK: Emerald Group Publishing Ltd.
- Pizam, A. (2015). *International encyclopedia of hospitality management*. Abingdon, UK: Routledge.
- Prajogo, D. I., & Sohal, A. S. (2003). The relationship between TQM practices, quality performance, and innovation performance: An empirical examination. *International Journal of Quality and Reliability Management*, 20(8), 901-918.
- Prajogo, D. I., & Sohal, A. S. (2006). The integration of TQM and technology/R&D management in determining quality and innovation performance. *Omega*, 34(3), 296-312.

- Prasad, K., & Dev, C. S. (2000). Managing hotel brand equity: A customer-centric framework for assessing performance. *The Cornell Hotel and Restaurant Administration Quarterly*, 41(3), 22-4.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Preacher, K. J., & Selig, J. P. (2012). Advantages of Monte Carlo confidence intervals for indirect effects. *Communication Methods and Measures*, 6(2), 77-98.
- Private Hospitals Association. (2013). *Jordan medical tourism guide 2013*. Retrieved on September 10, 2015 from [http://phajordan.org/portals/0/pha English final 8-2013.pdf](http://phajordan.org/portals/0/pha%20English%20final%208-2013.pdf).
- Private Hospitals Association. (2015). *Events and conference*. Retrieved on April 14, 2015, from <http://phajordan.org/EN/MediaCorner/EventsConferences.aspx>.
- Private Hospitals Association. (2016). *Medical tourism statistics book*. Amman. Jordan.
- Pullig, C., Simmons, C. J., & Netemeyer, R. G. (2006). Brand dilution: When do new brands hurt existing brands? *Journal of Marketing*, 70(2), 52-66.

- Rababah, K., Mohd, H., & Ibrahim, H. (2011). A study of the perception of the benefits of customer relationship management (CRM) system in Malaysian private hospitals. *Proceeding of the International Conference on Business and Economics Research*, 1, 327–330. Kuala Lumpur: IACSIT Press.
- Rahi, S. (2016). Impact of customer value, public relations perception and brand image on customer loyalty in services sector of Pakistan. *Arabian Journal of Business Management Review*, 2(4), 1-6.
- Rahimi, R., & Kozak, M. (2017). Impact of customer relationship management on customer satisfaction: The case of a budget hotel chain. *Journal of Travel and Tourism Marketing*, 34(1), 40-51.
- Rahimi, R., Köseoglu, M. A., Ersoy, A. B., & Okumus, F. (2017). Customer relationship management research in tourism and hospitality: A state-of-the-art. *Tourism Review*, 72(2), 209-220.
- Rahmanian Koshkaki, E. (2014). The role of product and brand emotion in purchase behavior, A study in Iranian home appliance context. *Journal of Asia Business Studies*, 8(3), 233-248.
- Rajapathirana, R. P. J., & Hui, Y. (2017). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation and Knowledge*, 1-16.
- Rajh, E. (2006). The effects of marketing mix elements on brand equity. *Croatian Economic Survey*, 14(8), 53-80.

- Ramez, W. S. (2012). Patients' perception of health care quality, satisfaction and behavioral intention: An empirical study in Bahrain. *International Journal of Business and Social Science*, 3(18), 131-141.
- Ramseook-Munhurrin, P., Lukea-Bhiwajee, S. D., & Naidoo, P. (2010). Service quality in the public service. *International Journal of Management and Marketing Research*, 3(1), 37-50.
- Rashid, B. B., & Tahir, S. B. (2013). Assessing the influence of customer relationship management (CRM) dimensions on organization performance: An empirical study in the hotel industry. *Journal of Hospitality and Tourism Technology*, 4(3), 228-247.
- Reeves, C. A., & Bednar, D. A. (1994). Defining quality: Alternatives and implications. *Academy of Management Review*, 19(3), 419-445.
- Reinartz, W., Krafft, M., & Hoyer, W. D. (2004). The customer relationship management process: Its measurement and impact on performance. *Journal of Marketing Research*, 41(3), 293-305.
- Rios, R. (2007). *Sources and antecedents of brand equity for online companies*. (Unpublished doctoral thesis). Royal Melbourne Institute of Technology, Australia.
- Roberts-Lombard, M., & Du Plessis, L. (2011). Influence of crm on customer loyalty-an application to the life insurance industry in South Africa. *Journal of Global Business and Technology*, 7(1), 24-34.

- Rodriguez, M., & Honeycutt, E. D. (2011). Customer relationship management (CRM)'s impact on B to B sales professionals' collaboration and sales performance. *Journal of Business-To-Business Marketing*, 18(4), 335-356.
- Romero, J., & Yagüe, M. J. (2016). Marketing assets: Relating brand equity and customer equity. *Intangible Capital*, 12(2), 591-618.
- Rönnbäck, Å., & Witell, L. (2008). A review of empirical investigations comparing quality initiatives in manufacturing and service organizations. *Managing Service Quality: An International Journal*, 18(6), 577-593.
- Rootman, C., Tait, M., & Bosch, J. (2007). The influence of bank employees on bank customer relationship management. *Acta Commercii*, 7 (1), 181-192.
- Rose, S., Spinks, N., & Canhoto, A (2014). *Management research: Applying the principles*. Abingdon, UK: Routledge.
- Rossi, R. J. (2010). *Applied biostatistics for the health sciences*. Hoboken, NJ: John Wiley & Sons.
- Rust, R. T., & Oliver, R. L. (1994). Service quality insight and management implications from the frontier. In R. T. Rust & R. L. Oliver (Eds.), *Service quality: New directions in theory and practice* (pp. 1-20). Thousand Oaks, CA: Sage Publications.
- Rust, R. T., Zahorik, A. J., & Keiningham, T. L. (1995). Return on quality (ROQ): Making service quality financially accountable. *The Journal of Marketing*, 59(2), 58-70.

- Saadat, N., & Nas, Z. (2013). Impact of customer relationship on customer loyalty in cellular industry: Evidence from KPK, Pakistan'. *Asian Journal of Management Sciences and Education*, 2(3), 20-30.
- Sadat, H. R., & Mehrara, A. (2015). The impact of advertising, sales promotion and sponsorship programs on brand equity: A case study among customers in Samsung products in Tehran. *European Online Journal of Natural and Social Sciences*, 2(3), 3487-3493.
- Sadek, H., Yousef, A., Ghoneim, A., & Tantawi, P. (2011). Measuring the effect of customer relationship management (CRM) components on the non financial performance of commercial bank: Egypt case. In *European, Mediterranean and Middle Eastern Conference on Information Systems (EMCIS)* (pp. 432-451), Athens: IGI Global.
- Sadikoglu, E., & Zehir, C. (2010). Investigating the effects of innovation and employee performance on the relationship between total quality management practices and firm performance: An empirical study of Turkish firms. *International Journal of Production Economics*, 127(1), 13-26.
- Saeed, M., Vij, S., & Men, T. S. (2010). Customer relationship management in personal computer manufacturing industry in Malaysia: An empirical study of five major global players. *Asia Pacific Business Review*, 6(4), 82-89.
- Saeed, R., Lodhi, R. N., Nazir, S., Safdar, M., Mahmood, Z., & Ahmad, M. (2013). Impact of customer relationship management on customer satisfaction. *World Applied Sciences Journal*, 26(12), 1653-1656.

- Salim, I. M., & Sulaiman, M. (2011). Impact of organizational innovation on firm performance: evidence from Malaysian-based ICT companies. *Business and Management Review*, 1(5), 10-16.
- Sallam, M. A. (2016). The impact of brand image and corporate branding on consumer's choice: The role of brand equity. *International Journal of Marketing Studies*, 8(1), 98-106.
- Sanayei, A., Shahin, A., & Taherfar, A. (2013). Analyzing the effects of brand innovativeness on attitude towards the brand considering the mediating role of consumer innovativeness with a case study in students of university of Isfahan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(3), 290-297.
- Sankrusme, S. (2013). Development strategies for taking Thailand's health healing tourism business into the global market. *Review of European Studies*, 5(5), 220-232.
- Santos-Vijande, M. L., & Álvarez-González, L. I. (2007). Innovativeness and organizational innovation in total quality oriented firms: The moderating role of market turbulence. *Technovation*, 27(9), 514-532.
- Sarlak, M. A., & Fard, R. S. (2009). The impact of CRM on the customer satisfaction in agricultural bank. *American Journal of Economics and Business Administration*, 1(2), 167-172.
- Sarwar, A. (2013). Medical tourism in Malaysia: Prospect and challenges. *Iranian Journal of Public Health*, 42(8), 795-805.

- Sasmita, J., & Mohd Suki, N. (2015). Young consumers' insights on brand equity: Effects of brand association, brand loyalty, brand awareness, and brand image. *International Journal of Retail and Distribution Management*, 43(3), 276-292.
- Scheaffer, R. L., Mendenhall, W., & Ott, L. (2006). *Elementary survey sampling* (6th ed.). Southbank, Vic: Thomson Brooks/Cole.
- Sehhat, S. (2013). A survey on important factors influencing brand equity: A case study of banking industry. *Management Science Letters*, 3(1), 315-320.
- Sekaran, U. (2003). *Research methods for business*. New York, NY: Wiley & Sons.
- Sekaran, U., & Bougie, R. (2013). *Research methods for business: A skill building approach* (6th ed.). Chichester, UK: John Wiley & Sons.
- Šerić, M. (2017). Relationships between social Web, IMC and overall brand equity: An empirical examination from the cross-cultural perspective. *European Journal of Marketing*, 51(3), 646-667.
- Šerić, M., Gil-Saura, I., & Mikulić, J. (2017). Customer-based brand equity building: Empirical evidence from Croatian upscale hotels. *Journal of Vacation Marketing*, 23(2), 133-144.
- Setyanti, S. W. L. H., Troena, E. A., Nimran, U., & Rahayu, M. (2013). Innovation role in mediating the effect of entrepreneurship orientation, management capabilities and knowledge sharing toward business performance: Study at Batik SMEs in East Java Indonesia. *Journal of Business and Management*, 8(4), 16-27.

- Severi, E., & Ling, K. C. (2013). The mediating effects of brand association, brand loyalty, brand image and perceived quality on brand equity. *Asian Social Science*, 9(3), 125-137.
- Shabbir, M. Q., Khan, A. A., & Khan, S. R. (2017). Brand loyalty brand image and brand equity: The mediating role of brand awareness. *International Journal of Innovation and Applied Studies*, 19(2), 416-423.
- Shan, A. W., Ahmad, M. F., & Nor, N. H. M. (2016). The Mediating effect of innovation between total quality management (TQM) and business performance. In *Materials Science and Engineering Conference Series*, 160(1), 1-9. Melaka: IOP Publishing.
- Sharma, S. (1996). *Applied multivariate techniques*. New York, NY: John Wiley and Sons.
- Sharma, S., Conduit, J., & Hill, S. R. (2014). Organizational capabilities for customer participation in health care service innovation. *Australasian Marketing Journal*, 22(3), 179-188.
- Shekhar Kumar, R., Dash, S., & Chandra Purwar, P. (2013). The nature and antecedents of brand equity and its dimensions. *Marketing Intelligence and Planning*, 31(2), 141-159.
- Sheng, M. L., & Teo, T. S. (2012). Product attributes and brand equity in the mobile domain: The mediating role of customer experience. *International Journal of Information Management*, 32(2), 139-146.

- Shiau, H. C. (2014). The impact of product innovation on behavior intention: The measurement of the mediating effect of the brand image of Japanese anime dolls. *Anthropologist*, 17(3), 777-788.
- Shofiah, S. (2017). Study of influence of customer relationship management on customer satisfaction in CV Batik Semarang. *Journal of Marketing Science*, 16(1), 57-69.
- Shoqirat, N., & Cameron, S. (2012). Promoting hospital patients' health in Jordan: Rhetoric and reality of nurses' roles. *International Journal of Nursing*, 1(1), 27-36.
- Shriedeh, F. B., & Abd. Ghani, N. H (2017). Impact of customer relationship management on brand equity: Medical tourist perspective. *Research Journal of Business Management*, 11(1), 28-38.
- Shriedeh, F. B., & Ghani, N. H. A. (2016). Impact of innovation on the relationship between customer relationship management and brand equity in the medical tourism of Jordan. *Journal of Research in Business, Economics and Management*, 7(4), 1150-1158.
- Sigala, M. (2005). Integrating customer relationship management in hotel operations: Managerial and operational implications. *International Journal of Hospitality Management*, 24(3), 391-413.
- Simon, C.J. and M.W. Sullivan, (1993). The measurement and determinants of brand equity: A financial approach, *Marketing Science*, 12(1): 28-52.

- Sin, L. Y., Alan, C. B., & Yim, F. H. (2005). CRM: Conceptualization and scale development. *European Journal of Marketing*, 39(11/12), 1264-1290.
- Singh, K. S. D., & Islam, M. A. (2017). Validating an instrument for measuring brand equity of CSR driven organizations in Malaysia. *Management and Marketing*, 12(2), 237-251.
- Singh, M. (2014). *Medical tourism potential: Going forward*. Retrieved from http://zunia.org/sites/default/files/media/node.files/me/448916_medical_tourismpot.
- Singh, S., & Rahul, M. (2010). Effectiveness of CRM in banking services with reference to ATM Services in NCR Delhi. *Asia Pacific Business Review*, 6(2), 141-149.
- Skountridaki, L. (2017). Barriers to business relations between medical tourism facilitators and medical professionals. *Tourism Management*, 59, 254-266.
- Slappendel, C. (1996). Perspectives on innovation in organizations. *Organization Studies*, 17(1), 107-129.
- Smith, M., & Chang, C. (2010). Improving customer outcomes through the implementation of customer relationship management: Evidence from Taiwan. *Asian Review of Accounting*, 18(3), 260-285.
- Solayappan, A., & Jayakrishnan, J. (2010). Key determinants of brand-customer relationship in hospital industry. *Economic Sciences Series*, 62(4), 119-128.

- Soltani, M., Esfidani, M. R., Jandaghi, G., & Soltaninejad, N. (2016). The effect of service quality on private brand image and purchase intention in the chain stores of ETKA. *World Scientific News*, 47(2), 202-216.
- Sondoh Jr, S. L., Omar, M. W., Wahid, N. A., Ismail, I., & Harun, A. (2007). The effect of brand image on overall satisfaction and loyalty intention in the context of color cosmetic. *Asian Academy of Management Journal*, 12(1), 83-107.
- Sriram, S., Balachander, S., & Kalwani, M. U. (2007). Monitoring the dynamics of brand equity using store-level data. *Journal of Marketing*, 71(2), 61-78.
- Srivastava, R. K. & Shocker, A. D. (1991). *Brand equity: A perspective on its meaning and measurement*. Cambridge, MA: Marketing Science Institute.
- Stanković, L., & Đukić, S. (2009). Challenges of strategic marketing of tourist destination under the crisis conditions. *Facta Universitatis, Series: Economics and Organization*, 6(1), 23-25.
- Stevenson, A. (2010). *Oxford dictionary of English*. New York, NY: Oxford University Press.
- Stoker, J. I., & Van der Heijden, B. I. (2001). Competence development and appraisal in organizations. *Journal of Career Development*, 28(2), 97-113.
- Subramaniam, A., Al Mamun, A., Permarupan, P. Y., & Zainol, N. R. B. (2014). Effects of brand loyalty, image and quality on brand equity:

- A study among bank Islam consumers in Kelantan, Malaysia. *Asian Social Science*, 10(14), 67-73.
- Sudman, S. (1976). *Applied sampling*. New York, NY: Academic Press.
- Suhr, D. (2008). Step your way through path analysis. In *Western Users of SAS ® Software Regional Conference* (pp. 1-10), Universal City, California. Retrieved from <http://old.wuss.org/proceedings09/09WUSSProceedings/papers/anl/ANL-SuhrShay.pdf>.
- Sultan, P., & Wong, H. Y. (2013). Antecedents and consequences of service quality in a higher education context. *Quality Assurance in Education*, 21(1), 70-95.
- Sund, K. J. (2008). Innovation in the postal sector: Strategies, barriers and enablers. In *Management of Network Industries (MIR) of the École Poly Technique Fédérale De Lausanne*, (pp. 1-20).
- Swan, J. E., & Combs, L. J. (1976). Product performance and consumer satisfaction: A new concept. *The Journal of Marketing*, 40(2), 25-33.
- Sze, L. H., & Hamid, N. I. N. B. A. (2012). Brand equity in automotive sector. *Proceedings of the 2nd International Conference on Management*. Malaysia.
- Taghian, F. (2016). The impact of brand extension strategies on brand equity: with the role of mediator brand image (Case study: Customers of Famila products in Gorgan). *International Journal of New Studies in Management Research*, 1(1), 38- 44.

- Taherparvar, N., Esmailpour, R., & Dostar, M. (2014). Customer knowledge management, innovation capability, and business performance: A case study of the banking industry. *Journal of Knowledge Management*, 18(3), 591-610.
- Taie, E. S. (2014). The effect of intellectual capital management on organizational competitive advantage in Egyptian hospitals. *International Journal of Business and Social Science*, 5(2), 160-167.
- Taleghani, M., & Almasi, M. (2011). Evaluate the factors affecting brand equity from the perspective of customers using Aaker's model. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 1(4), 64-76.
- Tangaza, M., Muhammed, A., & Bala, A. (2015). A review of customer relationship management, implementation and procedures from the rich nation and emerging market perspectives. *International Journal of Computer Science and Management Studies*, 15(3), 6-17.
- Taşkın, Ç., Emel, G. G., Karadamar, A. A., & Memiş, N. (2016). Exploring the relationships among the antecedents of brand loyalty: A research on an apparel brand. *IJASOS-International E-journal of Advances in Social Sciences*, 2(5), 305-314.
- Taylor, S. A., & Cronin Jr, J. J. (1994). Modeling patient satisfaction and service quality. *Marketing Health Services*, 14(1), 34.
- Teas, R. K. (1993). Expectations, performance evaluation, and consumers' perceptions of quality. *The Journal of Marketing*, 57(4), 18-34.

- Tehrani, S. N., Javadizadeh, B., & Nadi, M. (2015). The relationship between customer knowledge management, customer relationship with organizational innovation and customer loyalty (Case study: Consumers and manufacturers of protein industry in Isfahan Province). *International Journal of Business and Management Invention*, 4(2), 59-67.
- Theron, E., Terblanche, N. S., & Boshoff, C. (2008). The antecedents of relationship commitment in the management of relationships in business-to-business (B2B) financial services. *Journal of Marketing Management*, 24(9-10), 997-1010.
- Thornhill, S. (2006). Knowledge, innovation and firm performance in high- and low-technology regimes. *Journal of Business Venturing*, 21(5), 687-703.
- Toma, M., Mihoreanu, L., & Ionescu, A. (2014). Innovation capability and customer relationship management: A review. *Economics, Management and Financial Markets*, 9(4), 323-331.
- Tsai, H., Cheung, C., & Lo, A. (2010). An exploratory study of the relationship between customer-based casino brand equity and firm performance. *International Journal of Hospitality Management*, 29(4), 754-757.
- Tsiotsou, R. H., & Goldsmith, R. E. (2012). *Strategic marketing in tourism services*. Bingley: Emerald Group Publishing.

- Tuan, V. K. (2017). Effect of service interaction on the brand equity with a mediating role of relationship quality in small and Medium-Sized Enterprises (SMEs) in supermarket sector in Ho Chi Minh city (HCMC)–Vietnam. *Imperial Journal of Interdisciplinary Research*, 3(8), 147-159.
- Tuominen, P. (1999). Managing brand equity. *Lta*, 1(99), 65-100
- Usman, Y., Rida, Z., Madiha, A., & Mohsin, A. (2012). Studying brand loyalty in the cosmetics industry. *LogForum* 8 (4), 327-337.
- Uzkurt, C., Kimzan, H. S., & Yilmaz, C. (2016). A case study of the mediating role of innovation on the relationship between environmental uncertainty, market orientation, and firm performance. *International Journal of Innovation and Technology Management* 13 (6), 1-21.
- Vahdat, S., Hamzehgardeshi, L., Hessam, S., & Hamzehgardeshi, Z. (2014). Patient involvement in healthcare decision making: A review. *Iranian Red Crescent Medical Journal*, 16(1), 1-7.
- Valette-Florence, P., Guizani, H., & Merunka, D. (2011). The impact of brand personality and sales promotions on brand equity. *Journal of Business Research*, 64(1), 24-28.

- Van Doorn, J., & Leeftang, P. S. (2014). Does the importance of value, brand and relationship equity for customer loyalty differ between Eastern and Western cultures?. *International Business Review*, 23(1), 284-292.
- Vatjanasaregagul, L. (2007). *The relationship of service quality, consumer decision factors and brand equity*. (Unpublished doctoral dissertation). Nova Southeastern University, U.S.
- Vatjanasaregagul, L., & Wang, H. C. (2011). The impact of service quality and consumer decision factors on brand equity. *International Business and Economics Research Journal (IBER)*, 6(3), 97-104.
- Veerasoontorn, R., Beise-Zee, R., & Sivayathorn, A. (2011). Service quality as a key driver of medical tourism: The case of Bumrungrad International Hospital in Thailand. *International Journal of Leisure and Tourism Marketing*, 2(2), 140-158.
- Vildova, E., Martincik, D., Tluchor, J., & Jakubíková, D. (2015). Measuring customer satisfaction and loyalty in spa companies. *E+ M Ekonomie a Management*, 18(1), 151-168.
- Vincent, L. H., Bharadwaj S. G., & Challagalla G. N. (2004). *Does innovation mediate firm performance? A meta-analysis of determinants and consequences of organizational innovation* (Unpublished working paper). Atlanta, GA: Georgia Institute of Technology.

- Vinh, T. T. (2017). Measuring customer based brand equity: A case of Heineken from the beer market in Vietnam. *Asian Social Science*, 13(3), 177-184.
- Vinh, T. T., & Nga, V. T. Q. (2015). The relationship between components of customer based brand equity for destination: Conceptual framework and preliminary testing for scales. *South East Asia Journal of Contemporary Business, Economics and Law*, 7(2), 47-53.
- Vinh, T. T., Nga, V. T. Q., & Nguyen, N. P. (2017). The causal relationships between components of customer-based brand equity for a destination: Evidence from South Korean tourists in Danang city, Vietnam. *Asian Economic and Financial Review*, 7(4), 358-367.
- Virvilaite, R., Tumasonyte, D., & Sliburyte, L. (2015). The influence of word of mouth communication on brand equity: Receiver perspectives. *Procedia-Social and Behavioral Sciences*, 213, 641-646.
- Visnjic, I., Wiengarten, F., & Neely, A. (2016). Only the brave: Product innovation, service business model innovation, and their impact on performance. *Journal of Product Innovation Management*, 33(1), 36-52.
- Wali, A. F., Wright, L. T., & Uduma, I. A. (2015). Customer relationship management for brand commitment and brand loyalty. *British Journal of Marketing Studies*, 3(4), 45-58.

- Wang, C. H. (2014). Does service innovation matter in high-tech industry? *Journal of Technology Management and Innovation*, 9(2), 42-55.
- Wang, H. Y. (2012). Value as a medical tourism driver. *Managing Service Quality: An International Journal*, 22(5), 465-491.
- Wang, Y., Kandampully, J. A., Lo, H. P., & Shi, G. (2006). The roles of brand equity and corporate reputation in CRM: A Chinese study. *Corporate Reputation Review*, 9(3), 179-197.
- Washburn, J. H., & Plank, R. E. (2002). Measuring brand equity: An evaluation of a consumer-based brand equity scale. *Journal of Marketing Theory and Practice*, 10(1), 46-62.
- Watson, S., & Stolley, K. (2012). *Medical tourism: A reference handbook*. Santa Barbara, CA: ABC-CLIO.
- Weerawardena, J., & Coote, L. (2001). An empirical investigation into entrepreneurship and organizational innovation-based competitive strategy. *Journal of Research in Marketing and Entrepreneurship*, 3(1), 51-70.
- Weerawardena, J., & O'Cass, A. (2004). Exploring the characteristics of the market-driven firms and antecedents to sustained competitive advantage. *Industrial Marketing Management*, 33(5), 419-428.
- Weng, M., Ha, J., Wang, Y., & Tsai, C. (2012). A study of the relationship among service innovation, customer value and customer satisfaction: An empirical study of the hotel industry in Taiwan. *International Journal of Organizational Innovation*, 4(3), 98-112.

- Wong, H. Y. (2014). The mediating role of innovation in strategic international marketing. In *Handbook of Research on Effective Marketing in Contemporary Globalism*, 27-46. IGI Global.
- Wu, C. C. (2011). The impact of hospital brand image on service quality, patient satisfaction and loyalty. *African Journal of Business Management*, 5(12), 4873-4882.
- Wu, I. L., & Hsieh, P. J. (2015). Hospital innovation and its impact on customer-perceived quality of care: A process-based evaluation approach. *Total Quality Management and Business Excellence*, 26(1-2), 46-61.
- Yaghoubi, M., Asgari, H., & Javadi, M. (2017). The impact of the customer relationship management on organizational productivity, customer trust and satisfaction by using the structural equation model: A study in the Iranian hospitals. *Journal of Education and Health Promotion*, 6(6), 1-5.
- Yan, Q. (2015). Strategic marketing in tourism services. *Journal of Tourism and Cultural Change*, 13(3), 280-283.
- Yang, D. (2010). Building brand equity through perfect customer relationship management. In *3rd International Conference on Information Management, Innovation Management and Industrial Engineering (ICIII)*, 1, 329-332, Kunming: IEEE.
- Yang, Y., Liu, X., & Li, J. (2015). How customer experience affects the customer-based brand equity for tourism destinations. *Journal of Travel and Tourism Marketing*, 32(1), 97-113.

- Yao, H. I., & Khong, K. W. (2011). Effectiveness of customer relationship management on customer satisfaction in the commercial banks of Taiwan. *Contemporary Management Research*, 7(2), 105-116.
- Yap, S. F., & Kew, M. L. (2007). Service quality and customer satisfaction: Antecedents of customer's re-patronage intentions. *Sunway Academic Journal*, 4, 59-73.
- Yasin, N.M., Noor, M.N., & Mohamad, O. (2007). Does image of country-of-origin matter to Brand equity? *Journal of Product and Brand Management*, 16(1), 38-48.
- Yaşlıoğlu, M., Çalışkan, B. Ö. Ö., & Şap, Ö. (2013). The role of innovation and perceived service quality in creating customer value: A study on employees of a call center establishment. *Procedia-Social and Behavioral Sciences*, 99, 629-635.
- Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2), 79-94.
- Yoo, B. & N. Donthu, (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1-14.
- Yoo, B., & Donthu, N. (2002). Testing cross-cultural invariance of the brand equity creation process. *Journal of Product and Brand Management*, 11(6), 380-398.

- Yoo, B., Donthu, N., & Lee, S. (2000). An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28(2), 195-211.
- Yoo, D. K., & Park, J. A. (2007). Perceived service quality: Analyzing relationships among employees, customers, and financial performance. *International Journal of Quality and Reliability Management*, 24(9), 908-926.
- Yousapronpaiboon, K., & Johnson, W. C. (2013). Out-patient service quality perceptions in private Thai hospitals. *International Journal of Business and Social Science*, 4(2), 57-66.
- Yu-TeTu, S. Y. L., & Hsu, T. K. (2013). The impact of brand image and customer commitment on loyalty: An empirical study of automobile sector. *Information Management and Business Review*, 5(4), 181-193.
- Zablah, A. R., Bellenger, D. N., & Johnston, W. J. (2004). An evaluation of divergent perspectives on customer relationship management: Towards a common understanding of an emerging phenomenon. *Industrial Marketing Management* 33(6), 475-489.
- Zahra, S.A. & Covin, J.G. (1994). The financial implications of fit between competitive strategy and innovation types and sources. *The Journal of High Technology Management Research*, 5(2), 183-211.

- Zaied, R. M. B., Louati, H., & Affes, H. (2015). The relationship between Organizational innovations, internal Sources of knowledge and Organizational performance. *International Journal of Managing Value and Supply Chains*, 6(1), 67-81.
- Zarantonello, L., & Schmitt, B. H. (2013). The impact of event marketing on brand equity: The mediating roles of brand experience and brand attitude. *International Journal of Advertising*, 32(2), 255-280.
- Zarei, E., & Kazemi, M. (2014). An Empirical study of the impact of service quality on patient satisfaction in private hospitals, Iran. *Global Journal of Health Science*, 7(1), 1-9.
- Zehir, C., Köle, M., & Yıldız, H. (2015). The mediating role of innovation capability on market orientation and export performance: An implementation on SMEs in Turkey. *Procedia-Social and Behavioral Sciences*, 207, 700-708.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *The Journal of Marketing*, 52(3), 2-22.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *The Journal of Marketing*, 60(2), 31-46.
- Zhang, J., Pitsaphol, C., & Shabbir, R. (2014). The relationship of brand equity dimensions: A case study of Samsung brand in Thailand. *European Journal of Business and Management*, 6(16), 182-189.

- Zhang, Q., Feng, X., & Xiang, X. (2016). The impact of quality management practices on innovation in china: The moderating effects of market turbulence. *American Journal of Industrial and Business Management*, 6(03), 291-304.
- Zhang, Z. J. (2011). Customer knowledge management and the strategies of social software. *Business Process Management Journal*, 17(1), 82-106.
- Zikmund, W.G., Babin, B.J., Carr, J.C., & Griffin, M. (2009). *Business Research methods* (8th ed.). Mason, OH: South-Western Cengage Learning.
- Zineldin, M. (2006). The quality of health care and patient satisfaction: An exploratory investigation of the 5Qs model at some Egyptian and Jordanian medical clinics. *International Journal of Health Care Quality Assurance*, 19(1), 60-92.

APPENDIX A

SUMMARY OF OVERALL BRAND EQUITY SOURCES

Predictors of Overall Brand Equity	Author and Year
Perceived quality	Ahmad and Sherwani (2015), Asare and Lei (2017), Atilgan <i>et al.</i> (2005), Azadi <i>et al.</i> (2015), Buil <i>et al.</i> (2013), Chahal and Bala (2012), Dib and Alhaddad (2014), Ebeid (2014), Gill and Dawra (2010), Lei and Chu (2015), Mostafa (2015), Mukherjee and Shivani (2016), Shekhar Kumar <i>et al.</i> (2013), Singh and Islam (2017), Subramaniam, Al Mamun, Permarupan, and Zainol (2014), Vinh (2017), and Yoo and Donthu (2001).
Brand image	Akbar and Azhar (2011), Ansary and Hashim (2017), Asare and Lei (2017), Aspizain (2016), Chahal and Bala (2012), Chen (2010), Emari, Jafari, and Moghaddam (2014), Fatema, Azad, and Masum (2015), Hossien (2011), Mostafa (2015), Mukherjee and Shivani (2016), Ng, Butt, Khong, and Ong (2014), Rajh (2006), Shabbir, Khan, and Khan (2017), Subramaniam <i>et al.</i> (2014), and Šerić, Gil-Saura, and Mikulić (2017).
Brand awareness	Ahmad and Sherwani (2015), Ansary and Hashim (2017), Atilgan <i>et al.</i> (2005), Dib and Alhaddad (2014), Ebeid (2014), Gill and Dawra (2010), Mostafa (2015), Panda and Misra (2014), Rajh (2006), Shabbir <i>et al.</i> (2017), Shekhar Kumar <i>et al.</i> (2013), Singh and Islam (2017), and Vinh (2017).
Brand association	Ahmad and Sherwani (2015), Atilgan <i>et al.</i> (2005), Buil <i>et al.</i> (2013), Ebeid (2014), Emari <i>et al.</i> (2012), Gill and Dawra (2010), Hossien (2011), Shekhar Kumar <i>et al.</i> (2013), Singh and Islam (2017), and Vinh (2017).
Brand awareness/associations	Azadi <i>et al.</i> (2015) and Yoo and Donthu (2001).
Brand loyalty	Ahmad and Sherwani (2015), Altaf, Iqbal, Mohd. Mokhtar, and Sial (2017), Asare and Lei (2017), Atilgan <i>et al.</i> (2005), Azadi <i>et al.</i> (2015), Buil <i>et al.</i> (2013), Chahal and Bala (2012), Dib and Alhaddad (2014), Ebeid (2014), Emari <i>et al.</i> (2012), Fatema <i>et al.</i> (2015), Gill and Dawra (2010), Girard, Trapp, Pinar, Gulsoy, and Boyt (2017), Hossien (2011), Mostafa (2015), Panda and Misra (2014), Shabbir <i>et al.</i> (2017), Shekhar Kumar <i>et al.</i> (2013), Singh and Islam (2017), Subramaniam <i>et al.</i> (2014), Šerić <i>et al.</i> (2017), Vinh (2017), and Yoo and Donthu (2001).

Marketing communication activities	Bakshi, Bakshi, Mishra, and Mishra (2017), Sadat and Mehrara (2015), Šerić (2017), and Valette-Florence <i>et al.</i> (2011).
Customer experience	Hepola, Karjaluoto, and Hintikka (2017) and Zarantonello and Schmitt (2013).
Service quality	Aspizain (2016), Ha (2009), Jahanzeb <i>et al.</i> (2013), Vatjanasaregagul (2007), and Vatjanasaregagul and Wang (2011).
Trust	Akbar and Azhar (2011), Chen (2010), Dib and Alhaddad (2014), and Shekhar Kumar <i>et al.</i> (2013).
Brand attitude	Ansary and Hashim (2017), Emari <i>et al.</i> (2012), Hossien (2011), and Zarantonello and Schmitt (2013).
Others	Akbar and Azhar (2011), Ansary and Hashim (2017), Azadi <i>et al.</i> (2015), Chen (2010), Emari <i>et al.</i> (2012), Hepola <i>et al.</i> (2017), Hossien (2011), Jahanzeb <i>et al.</i> (2013), Lei and Chu (2015), Liao, Wu, Amaya Rivas, and Lin Ju (2017), Mostafa (2015), Ng <i>et al.</i> (2014), Panda and Misra (2014), Romero and Yagüe (2016), Tuan (2017), Valette-Florence <i>et al.</i> (2011), and Zarantonello and Schmitt (2013).



UUM
Universiti Utara Malaysia

**APPENDIX B
PART 1**

PILOT STUDY QUESTIONNAIRE



**COLLEGE OF BUSINESS
UNIVERSITI UTARA MALAYSIA**

Dear Sir/ Madam,

I am a doctoral student at University Utara Malaysia (UUM) under the supervision of Dr. Noor Hasmini. I am currently conducting an academic questionnaire survey to investigate the relationships among customer relationship management, service quality, innovation, and brand equity in the private hospitals in the Hashemite Kingdom of Jordan. This study is to fulfill requirements for the degree of doctoral of philosophy in marketing at the university. The questionnaire is divided into five sections, namely, section A (patient relationship management), section B (service quality), section C (innovation), section D (brand equity), and section E (respondent profile). It is hoped that the results of this survey will provide important information on the development of the Jordanian healthcare in the context of my study. I sincerely hope that you would spare me a little of your time (not more than 25 minutes) to answer this questionnaire.

Your answers are very valuable to the accuracy of present study. Please be rest assured that all your responses will be kept strictly confidential and for academic purposes only.

If you wish to know more about this study, please do not hesitate to contact me at:

Fayez.shriedeh@yahoo.com, or alternatively, you can speak to me directly at this number: **00601121008879 (Malaysia), or 00962797188993 (Jordan).**

Thank you again for your support and assistance.

Yours truly,
Fayez Shriedeh

Scan Question: Have you come to Jordan for medical treatment purposes?

☐ Yes ☐ No

If yes, please continue answering the questionnaire only if your answer for this question was "YES".

Section A: Patient Relationship Management: Please indicate how strongly you agree or disagree with the following statements. You can circle your chosen answer anywhere between 1 and 7. Please remember, there are no correct or wrong answers.

No.	Statement	Strongly Disagree						Strongly Agree
1	The employees of this hospital are motivated to help patients in a responsive manner.	1	2	3	4	5	6	7
2	This hospital provides channels to enable interactive two-way communication between patients and hospital.	1	2	3	4	5	6	7
3	The employees of this hospital fully try to understand the patient's needs via generating a lot of information about me.	1	2	3	4	5	6	7
4	The employees of this hospital are willing to provide prompt service to the patients.	1	2	3	4	5	6	7
5	This hospital is very interested in development of new products and services in collaboration with the patients.	1	2	3	4	5	6	7
6	This hospital is responsive to modifying the products and services according to my suggestions.	1	2	3	4	5	6	7
7	This hospital involves me regarding health market evaluations.	1	2	3	4	5	6	7
8	This hospital involves me in technology-based health services.	1	2	3	4	5	6	7
9	This hospital involves me directly in the development of my healthcare status.	1	2	3	4	5	6	7
10	This hospital involves me in the development of my healthcare indirectly- through a person representing me.	1	2	3	4	5	6	7
11	This hospital is committed to making adjustments to suit patients' needs.	1	2	3	4	5	6	7
12	This hospital provides suggestions for products and services for patients.	1	2	3	4	5	6	7
13	This hospital has patient loyalty or retention programs.	1	2	3	4	5	6	7
14	This hospital really takes care of developing successful long-term relationship with patients.	1	2	3	4	5	6	7
15	This hospital has the right software to serve patients.	1	2	3	4	5	6	7
16	This hospital has the right hardware to serve patients.	1	2	3	4	5	6	7
17	This hospital has adequate information about patients available in every touch point.	1	2	3	4	5	6	7
18	This hospital has perfect web-based patient interaction.	1	2	3	4	5	6	7
19	This hospital maintains a comprehensive database of patients.	1	2	3	4	5	6	7
20	The employees of this hospital are able to build relationship with patients through utilization of computer technology.	1	2	3	4	5	6	7

21	This hospital works with us to overcome difficulties.	1	2	3	4	5	6	7
22	This hospital works with patients to help solve each other's conflicts.	1	2	3	4	5	6	7
23	The parties are jointly responsible for getting things done.	1	2	3	4	5	6	7

Section B: Service Quality: Please indicate how strongly you agree or disagree with the following statements. You can circle your chosen answer anywhere between 1 and 7. Please remember, there are no correct or wrong answers.

No.	Statement	Strongly Disagree						Strongly Agree
1	This hospital has visually appealing materials associated with the service.	1	2	3	4	5	6	7
2	The physical facilities of this hospital are visually appealing.	1	2	3	4	5	6	7
3	The employees of this hospital are well dressed and appear neat.	1	2	3	4	5	6	7
4	Availability of modern equipment in this hospital.	1	2	3	4	5	6	7
5	The employees of this hospital show a sincere interest in solving patients' problems.	1	2	3	4	5	6	7
6	This hospital maintains error-free records.	1	2	3	4	5	6	7
7	This hospital provides services at promised times.	1	2	3	4	5	6	7
8	This hospital performs the service right from the first time.	1	2	3	4	5	6	7
9	I could make an appointment easily at this hospital.	1	2	3	4	5	6	7
10	The staff of this hospital tells patients exactly when services will be provided.	1	2	3	4	5	6	7
11	The employees of this hospital are always willing to help patients'.	1	2	3	4	5	6	7
12	The employees of this hospital are never too busy to respond to patients requests'.	1	2	3	4	5	6	7
13	I feel secure in dealing with this hospital.	1	2	3	4	5	6	7
14	I could trust the employees of this hospital.	1	2	3	4	5	6	7
15	The employees of this hospital are consistently courteous.	1	2	3	4	5	6	7
16	The employees of this hospital are knowledgeable.	1	2	3	4	5	6	7
17	The staff of this hospital gives me personal attention.	1	2	3	4	5	6	7
18	The staff of this hospital treats me with warm and caring attitude.	1	2	3	4	5	6	7
19	The staff of this hospital understands patients' feeling of discomfort.	1	2	3	4	5	6	7
20	This hospital does have operating hours convenient to all patients.	1	2	3	4	5	6	7
21	The staff of this hospital has best interests of patients in their heart.	1	2	3	4	5	6	7

Section C: Innovation: Please indicate how strongly you agree or disagree with the following statements. You can circle your chosen answer anywhere between 1 and 7. Please remember, there are no correct or wrong answers.

No.	Statement	Strongly Disagree						Strongly Agree
1	This hospital frequently supplements unique new products for the patients.	1	2	3	4	5	6	7
2	This hospital is highly innovative compared to other hospitals in the market.	1	2	3	4	5	6	7
3	This hospital often launches innovative products not available in the market.	1	2	3	4	5	6	7
4	This hospital launches personalized products according to the patient needs.	1	2	3	4	5	6	7
5	This hospital medical equipment's have functions and features other hospitals lack.	1	2	3	4	5	6	7
6	This hospital regularly updates and well maintains its medical equipment.	1	2	3	4	5	6	7
7	This hospital provides innovation in diagnostic procedures.	1	2	3	4	5	6	7
8	This hospital provides innovation in treatment processes.	1	2	3	4	5	6	7
9	This hospital provides skills and experience medical staff.	1	2	3	4	5	6	7
10	This hospital's healthcare services are particularly comprehensive.	1	2	3	4	5	6	7
11	This hospital's services put my mind at ease.	1	2	3	4	5	6	7
12	This hospital is particularly fast when handling patient complaints.	1	2	3	4	5	6	7
13	This hospital provides innovative services before treatment such as free consulting services.	1	2	3	4	5	6	7
14	This hospital provides innovative services after treatment such as entertainment and booking services.	1	2	3	4	5	6	7
15	This hospital instantly updates the internet services.	1	2	3	4	5	6	7
16	This hospital often leads over other hospitals in launching innovative prices.	1	2	3	4	5	6	7
17	This hospital provides innovative distributing methods to the market such as electronic health and mobile health.	1	2	3	4	5	6	7
18	This hospital leads over other hospitals in promoting the hospital such as gifts and special discounts.	1	2	3	4	5	6	7
19	This hospital continually enlarges potential demand markets.	1	2	3	4	5	6	7
20	This hospital is innovative in building patient relationship.	1	2	3	4	5	6	7
21	This hospital is innovative in registration process when using different care units.	1	2	3	4	5	6	7
22	This hospital is innovative in admission/discharges process.	1	2	3	4	5	6	7
23	This hospital is innovative in patient care process.	1	2	3	4	5	6	7
24	This hospital is innovative in computer based payment process.	1	2	3	4	5	6	7

Section D: Overall Brand Equity: Please indicate how strongly you agree or disagree with the following statements. You can circle your chosen answer anywhere between 1 and 7. Please remember, there are no correct or wrong answers.

No.	Statement	Strongly Disagree						Strongly Agree
1	I would prefer the name of this hospital to other names, even if another hospital is identical to the quality of this hospital.	1	2	3	4	5	6	7
2	It makes sense to frequently choose this hospital, even if another hospital has the same services.	1	2	3	4	5	6	7
3	The name of this hospital is more attractive to me than any other hospital name.	1	2	3	4	5	6	7
4	It seems smarter to choose the services of this hospital rather than the services of any other hospital.	1	2	3	4	5	6	7
5	Low risk strategy would be to purchase the services of this hospital instead of the services of any other hospital.	1	2	3	4	5	6	7
6	The name of this hospital implies something superior to other hospitals.	1	2	3	4	5	6	7
7	It is smarter to choose this hospital, even if another hospital has the same prices as this hospital.	1	2	3	4	5	6	7
8	It is smarter to choose this hospital, even if another hospital has the same quality as this hospital.	1	2	3	4	5	6	7
9	I would choose this hospital even when I'm not very sure that this hospital has better features than other hospital names.	1	2	3	4	5	6	7
10	The name of this hospital may be the primary reason to use the services of this hospital.	1	2	3	4	5	6	7
11	I would choose this hospital, even if I have been given a choice between this hospital and another hospital that seems identical with the quality of this hospital.	1	2	3	4	5	6	7

Section E: Respondent Profile

Particular	Please tick (✓) on the appropriate circle
Gender	Male <input type="radio"/> Female <input type="radio"/> <input type="radio"/>
Age	18-25 <input type="radio"/> 26-35 <input type="radio"/> 36-45 <input type="radio"/> 46-55 <input type="radio"/> Over 56 years <input type="radio"/>
Education	High School <input type="radio"/> Diploma <input type="radio"/> Bachelor's <input type="radio"/> Master <input type="radio"/> PhD <input type="radio"/> Others (please specify).....
Marital status	Single <input type="radio"/> Married <input type="radio"/> Divorced <input type="radio"/> Widowed <input type="radio"/> Separated <input type="radio"/>
Gross monthly salary in USD (\$)	Below 1000 <input type="radio"/> 1001-2000 <input type="radio"/> 2001-3000 <input type="radio"/> 3001 and above <input type="radio"/>
Payment type	Insurance company <input type="radio"/> Government <input type="radio"/> By own <input type="radio"/> Others (please specify).....
Country of origin	Gulf Region <input type="radio"/> Yemen <input type="radio"/> Syria <input type="radio"/> Palestine <input type="radio"/> Libya <input type="radio"/> Sudan <input type="radio"/> Iraq <input type="radio"/> Algeria <input type="radio"/> Others (please specify).....
Visit frequency	One Time <input type="radio"/> Two times and more <input type="radio"/>



UUM
Universiti Utara Malaysia

**APPENDIX B
PART 2**

FIELD STUDY QUESTIONNAIRE



**COLLEGE OF BUSINESS
UNIVERSITI UTARA MALAYSIA**

Dear Sir/ Madam,

I am a doctoral student at University Utara Malaysia (UUM) under the supervision of Dr. Noor Hasmini. I am currently conducting an academic questionnaire survey to investigate the relationships among customer relationship management, service quality, innovation, and brand equity in the private hospitals in the Hashemite Kingdom of Jordan. This study is to fulfill requirements for the degree of doctoral of philosophy in marketing at the university. The questionnaire is divided into five sections, namely, section A (patient relationship management), section B (service quality), section C (innovation), section D (brand equity), and section E (respondent profile). It is hoped that the results of this survey will provide important information on the development of the Jordanian healthcare in the context of my study. I sincerely hope that you would spare me a little of your time (not more than 25 minutes) to answer this questionnaire.

Your answers are very valuable to the accuracy of present study. Please be rest assured that all your responses will be kept strictly confidential and for academic purposes only.

If you wish to know more about this study, please do not hesitate to contact me at:

Fayez.shriedeh@yahoo.com, or alternatively, you can speak to me directly at this number: **00601121008879 (Malaysia), or 00962797188993 (Jordan).**

Thank you again for your support and assistance.

Yours truly,
Fayez Shriedeh

Scan Question: Have you come to Jordan for medical treatment purposes?

☐ Yes ☐ No

If yes, please continue answering the questionnaire only if your answer for this question was "YES".

Section A: Patient Relationship Management: Please indicate how strongly you agree or disagree with the following statements. You can circle your chosen answer anywhere between 1 and 7. Please remember, there are no correct or wrong answers.

No.	Statement	Strongly Disagree						Strongly Agree
1	The employees of this hospital are motivated to help patients in a responsive manner, e.g. through interaction and touch points.	1	2	3	4	5	6	7
2	This hospital provides communication channels to enable interaction between patients and hospital.	1	2	3	4	5	6	7
3	The employees of this hospital fully try to understand the patient's needs via generating a lot of information about me.	1	2	3	4	5	6	7
4	The employees of this hospital are willing to provide prompt service to the patients.	1	2	3	4	5	6	7
5	This hospital is responsive to modifying the products and services according to my suggestions.	1	2	3	4	5	6	7
6	This hospital involves me in technology-based health services such as mobile-based health services, web e-services.	1	2	3	4	5	6	7
7	This hospital involves me directly in the development of my healthcare status.	1	2	3	4	5	6	7
8	This hospital is committed to making adjustments to suit patients' needs.	1	2	3	4	5	6	7
9	This hospital provides suggestions for products and services for patients.	1	2	3	4	5	6	7
10	This hospital has patient loyalty or retention programs.	1	2	3	4	5	6	7
11	This hospital has the right software to serve patients.	1	2	3	4	5	6	7
12	This hospital has the right hardware to serve patients.	1	2	3	4	5	6	7
13	This hospital has adequate information about patients available in every touch point.	1	2	3	4	5	6	7
14	This hospital maintains a comprehensive database of patients.	1	2	3	4	5	6	7
15	The employees of this hospital are able to build relationship with patients through utilization of computer technology.	1	2	3	4	5	6	7
16	No matter who is the source of problem, responsibility is taken by this hospital and patients to overcome the difficulties.	1	2	3	4	5	6	7
17	This hospital works with patients to help solve each other's conflicts.	1	2	3	4	5	6	7
18	The parties are jointly responsible for getting things done.	1	2	3	4	5	6	7

Section B: Service Quality: Please indicate how strongly you agree or disagree with the following statements. You can circle your chosen answer anywhere between 1 and 7. Please remember, there are no correct or wrong answers.

No.	Statement	Strongly Disagree						Strongly Agree
1	This hospital has visually appealing materials associated with the service.	1	2	3	4	5	6	7
2	The employees of this hospital are well dressed and appear neat.	1	2	3	4	5	6	7
3	Availability of modern equipment in this hospital.	1	2	3	4	5	6	7
4	This hospital maintains error-free records.	1	2	3	4	5	6	7
5	This hospital provides services at promised times.	1	2	3	4	5	6	7
6	This hospital performs the service right from the first time.	1	2	3	4	5	6	7
7	The staff of this hospital tells patients exactly when services will be provided.	1	2	3	4	5	6	7
8	The employees of this hospital are always willing to help patients'.	1	2	3	4	5	6	7
9	The employees of this hospital are never too busy to respond to patients requests'.	1	2	3	4	5	6	7
10	I feel secure in dealing with this hospital.	1	2	3	4	5	6	7
11	I could trust the employees of this hospital.	1	2	3	4	5	6	7
12	The employees of this hospital are knowledgeable.	1	2	3	4	5	6	7
13	The staff of this hospital treats me with warm and caring attitude.	1	2	3	4	5	6	7
14	This hospital does have operating hours convenient to all patients.	1	2	3	4	5	6	7
15	The staff of this hospital has best interests of patients in their heart.	1	2	3	4	5	6	7

Section C: Innovation: Please indicate how strongly you agree or disagree with the following statements. You can circle your chosen answer anywhere between 1 and 7. Please remember, there are no correct or wrong answers.

No.	Statement	Strongly Disagree						Strongly Agree
1	This hospital is highly innovative compared to other hospitals in the market.	1	2	3	4	5	6	7
2	This hospital often launches diagnostic and treatment equipments not available in the market.	1	2	3	4	5	6	7
3	This hospital launches personalized diagnostic and treatment equipments according to the patient needs.	1	2	3	4	5	6	7
4	This hospital diagnostic and treatment equipments have functions and features other hospitals lack.	1	2	3	4	5	6	7
5	This hospital provides innovation in diagnostic procedures.	1	2	3	4	5	6	7
6	This hospital provides innovation in treatment processes.	1	2	3	4	5	6	7

7	This hospital provides skills and experience medical staff.	1	2	3	4	5	6	7
8	This hospital's services put my mind at ease.	1	2	3	4	5	6	7
9	This hospital is particularly fast when handling patient complaints.	1	2	3	4	5	6	7
10	This hospital provides innovative services before treatment such as free consulting services.	1	2	3	4	5	6	7
11	This hospital often leads over other hospitals in launching innovative prices.	1	2	3	4	5	6	7
12	This hospital provides innovative distributing methods to the market such as electronic health and mobile health.	1	2	3	4	5	6	7
13	This hospital leads over other hospitals in promoting the hospital such as gifts and special discounts.	1	2	3	4	5	6	7
14	This hospital continually attracts different patient groups.	1	2	3	4	5	6	7
15	This hospital is innovative in building patient relationship.	1	2	3	4	5	6	7
16	This hospital is innovative in registration process when using different care units.	1	2	3	4	5	6	7
17	This hospital is innovative in admission/discharges process.	1	2	3	4	5	6	7
18	This hospital is innovative in patient care process.	1	2	3	4	5	6	7

Section D: Overall Brand Equity: Please indicate how strongly you agree or disagree with the following statements. You can circle your chosen answer anywhere between 1 and 7. Please remember, there are no correct or wrong answers.

No.	Statement	Strongly Disagree						Strongly Agree
1	It makes sense to frequently choose this hospital, even if another hospital has the same services.	1	2	3	4	5	6	7
2	The name of this hospital is more attractive to me than any other hospital name.	1	2	3	4	5	6	7
3	It seems smarter to choose the services of this hospital rather than the services of any other hospital.	1	2	3	4	5	6	7
4	The name of this hospital implies something superior to other hospitals.	1	2	3	4	5	6	7
5	It is smarter to choose this hospital, even if another hospital has the same quality as this hospital.	1	2	3	4	5	6	7

Section E: Respondent Profile

Particular	Please tick (✓) on the appropriate circle
Gender	Male <input type="radio"/> Female <input type="radio"/> <input type="radio"/>
Age	18- 25 <input type="radio"/> 26-35 <input type="radio"/> 36-45 <input type="radio"/> 46-55 <input type="radio"/> Over 56 years <input type="radio"/>
Education	High School <input type="radio"/> Diploma <input type="radio"/> Bachelor's <input type="radio"/> Master <input type="radio"/> PhD <input type="radio"/> Others (please specify).....
Marital status	Single <input type="radio"/> Married <input type="radio"/> Divorced <input type="radio"/> Widowed <input type="radio"/> Separated <input type="radio"/>
Gross monthly salary in USD (\$)	Below 1000 <input type="radio"/> 1001-2000 <input type="radio"/> 2001-3000 <input type="radio"/> 3001 and above <input type="radio"/>
Payment type	Insurance company <input type="radio"/> Government <input type="radio"/> By own <input type="radio"/> Others (please specify).....
Country of origin	Gulf Region <input type="radio"/> Yemen <input type="radio"/> Syria <input type="radio"/> Palestine <input type="radio"/> Libya <input type="radio"/> Sudan <input type="radio"/> Iraq <input type="radio"/> Algeria <input type="radio"/> Others (please specify).....
Visit frequency	One Time <input type="radio"/> Two times and more <input type="radio"/>



UUM
Universiti Utara Malaysia

APPENDIX B
PART 3

PILOT STUDY ARABIC QUESTIONNAIRE



كلية الأعمال
جامعة اوتارا - ماليزيا

تحية طيبة وبعد:

أنا طالب في جامعة اوتارا الماليزية (UUM) أعمل للحصول على درجة الدكتوراه تحت إشراف الدكتور نور هاسميني. أقوم حاليا بإجراء مسح استبيان أكاديمي لدراسة العلاقات بين إدارة العلاقة مع العملاء، جودة الخدمة، الابتكار والعلامة التجارية في المستشفيات الخاصة في المملكة الأردنية الهاشمية. تسعى هذه الدراسة لتلبية متطلبات الحصول على درجة الدكتوراه في فلسفة التسويق.

تنقسم الاستبانة إلى خمسة أقسام وهي كالآتي: القسم أ (إدارة العلاقة مع المرضى)، القسم ب (جودة الخدمة)، القسم ج (الابتكار)، القسم د (العلامة التجارية)، القسم هـ (ملف المجيب). أمل أن تقدم نتائج هذا المسح معلومات هامة حول تطور الرعاية الصحية الأردنية في سياق دراستي. كما أمل أن تعبرني القليل من وقتك (ما لا يزيد عن 25 دقيقة) للإجابة على هذا الاستبيان. إن إجاباتك على هذه الأسئلة مفيدة جدا لدقة الدراسة. ويمكنني أن أطمئنك أن جميع ردودك سيتم الاحتفاظ بها ومعاملتها بسرية تامة ولن تستخدم سوى لأغراض أكاديمية.

إذا كنت ترغب في معرفة المزيد عن هذه الدراسة، فلا تتردد في التواصل معي على العنوان التالي:

Fayez.shriedeh@yahoo.com

أو يمكنك التحدث معي مباشرة على الرقم: 00601121008879 (ماليزيا)، أو 00962797188993 (الأردن).

أشكرك مرة أخرى على دعمك ومساعدتك

المخلص،

فايز الشريدة

سؤال : هل قدمت الى الاردن بهدف العلاج؟ ☐ نعم ☐ لا

ملاحظة : إذا كانت اجابتك على هذا السؤال "نعم"، من فضلك أكمل الإجابة على الاستبيان أدناه.

القسم أ: إدارة العلاقات مع المرضى: يرجى الإشارة الى درجة اتفاقك مع العبارات المذكورة أدناه. ضع دائرة حول الإجابة التي تجدها مناسبة بين 1 و 7. يرجى العلم بأنه لا يوجد أجابة صحيحة أو خاطئة.

العبارة	1	2	3	4	5	6	7
1 طاقم المستشفى متحفز لمساعدة المرضى والاستجابة لهم (من خلال التفاعل ونقاط الاتصال المباشر مع المرضى).	1	2	3	4	5	6	7
2 يوفر هذا المستشفى قنوات تواصل تمكن المرضى و المستشفى من التواصل معا.	1	2	3	4	5	6	7
3 يسعى طاقم المستشفى الى فهم متكامل لإحتياجات المرضى من خلال أخذ معلومات وافية عن المريض.	1	2	3	4	5	6	7
4 طاقم المستشفى على أتم الاستعداد لتقديم الخدمة الفورية للمرضى.	1	2	3	4	5	6	7
5 يحرص المستشفى على تطوير منتجات و خدمات صحية و علاجية جديدة بالتعاون مع المرضى.	1	2	3	4	5	6	7
6 يتجاوب المستشفى مع اقتراحاتي بشأن تعديل وتطوير الخدمات والمنتجات الصحية والعلاجية.	1	2	3	4	5	6	7
7 يشركني المستشفى في تقييم السوق الصحي.	1	2	3	4	5	6	7
8 يشركني المستشفى في الخدمات الصحية القائمة على التكنولوجيا، مثل تقديم الخدمات الصحية عن طريق الهاتف الخليوي أو شبكة الانترنت.	1	2	3	4	5	6	7
9 يشركني المستشفى بصفة شخصية فيما يتعلق بتطور حالتي الصحية.	1	2	3	4	5	6	7
10 يشركني المستشفى في تطور حالتي الصحية بطريقة غير مباشرة - من خلال من ينوب عني.	1	2	3	4	5	6	7
11 يلتزم المستشفى بإجراء التعديلات اللازمة لتناسب مع إحتياجات المرضى.	1	2	3	4	5	6	7
12 يقدم المستشفى اقتراحات للمرضى حول المنتجات والخدمات الصحية والعلاجية.	1	2	3	4	5	6	7
13 يمتلك المستشفى برامج للمحافظة على ولاء المرضى ورضاهم عن الخدمات.	1	2	3	4	5	6	7
14 يهتم المستشفى حقا بخلق علاقات ناجحة وطويلة الأمد مع المرضى.	1	2	3	4	5	6	7
15 يمتلك المستشفى برمجيات الحاسوب المناسبة لخدمة المرضى.	1	2	3	4	5	6	7
16 يمتلك المستشفى معدات الحاسوب والأجهزة المناسبة لخدمة المرضى.	1	2	3	4	5	6	7
17 يمتلك المستشفى معلومات كافية عن المرضى متوفرة في جميع نقاط الإتصال.	1	2	3	4	5	6	7
18 يتفاعل المستشفى مع المرضى من خلال شبكة الإنترنت.	1	2	3	4	5	6	7
19 يمتلك المستشفى قاعدة بيانات شاملة حول المرضى.	1	2	3	4	5	6	7
20 يستغل طاقم المستشفى تكنولوجيا الحاسوب لبناء علاقات ايجابية مع المرضى.	1	2	3	4	5	6	7
21 عند حدوث مشكله و بغض النظر عن مصدرها، يتحمل المستشفى والمرضى معا المسؤولية في التغلب عليها.	1	2	3	4	5	6	7
22 يعمل المستشفى و المرضى معا في حل مشاكل بعضهما البعض.	1	2	3	4	5	6	7
23 يتحمل المستشفى والمرضى معا مسؤولية انجاز الأمور.	1	2	3	4	5	6	7

القسم ب: جودة الخدمة: يرجى الإشارة الى درجة اتفاقك مع العبارات المذكورة أدناه. ضع دائرة حول الإجابة التي تجدها مناسبة بين 1 و 7. يرجى العلم بأنه لا يوجد أجابة صحيحة أو خاطئة.

العبارة	لا أوافق بشدة	1	2	3	4	5	6	7 أوافق بشدة
1 يمتلك هذا المستشفى مواد دعائية بصرية جذابة تتناسب مع طبيعة الخدمات الصحية والعلاجية التي يقدمها.	1	2	3	4	5	6	7	
2 تظهر مرافق المستشفى بشكل جذاب.	1	2	3	4	5	6	7	
3 يتميز طاقم المستشفى بحسن الهندام والمظهر.	1	2	3	4	5	6	7	
4 يمتلك المستشفى معدات وأجهزة حديثة.	1	2	3	4	5	6	7	
5 يظهر طاقم المستشفى اهتماماً حقيقياً بحل مشكلات المرضى.	1	2	3	4	5	6	7	
6 يحتفظ المستشفى بسجلات دقيقة وموثقة.	1	2	3	4	5	6	7	
7 يلتزم المستشفى بتقديم الخدمة للمرضى بالموعد المتفق عليه.	1	2	3	4	5	6	7	
8 يحرص المستشفى على تقديم الخدمات الصحية بطريقة صحيحة من أول مرة.	1	2	3	4	5	6	7	
9 يسهل أخذ موعد بسهولة في هذا المستشفى.	1	2	3	4	5	6	7	
10 يحرص طاقم المستشفى على إخبار المرضى بالضبط عن أوقات تقديم الخدمات الصحية والعلاجية لهم.	1	2	3	4	5	6	7	
11 طاقم المستشفى دائماً على أتم الاستعداد لمساعدة وخدمة المرضى.	1	2	3	4	5	6	7	
12 يعمل طاقم المستشفى على خدمة المرضى وتلبية احتياجاتهم بأي وقت رغم انشغالهم.	1	2	3	4	5	6	7	
13 أنا أشعر بالأمان عند التعامل مع هذا المستشفى.	1	2	3	4	5	6	7	
14 أنا أثق بطاقم المستشفى.	1	2	3	4	5	6	7	
15 يتسم طاقم المستشفى بالأدب وحسن المعاملة مع المرضى.	1	2	3	4	5	6	7	
16 يتميز طاقم المستشفى بحسن الإطلاع والمعرفة والخبرة.	1	2	3	4	5	6	7	
17 يوليئي طاقم المستشفى اهتماماً وانتباهاً شخصياً.	1	2	3	4	5	6	7	
18 يتعامل طاقم المستشفى معي بعناية ودفء.	1	2	3	4	5	6	7	
19 يتفهم طاقم المستشفى شعور المرضى بعدم الراحة والاحراج.	1	2	3	4	5	6	7	
20 تتناسب ساعات عمل المستشفى جميع المرضى.	1	2	3	4	5	6	7	
21 يضع المستشفى مصلحة المرضى في مقدمة اهتمامات الادارة والعاملين.	1	2	3	4	5	6	7	

القسم ج: الابتكار: يرجى الإشارة الى درجة اتفاقك مع العبارات المذكورة أدناه. ضع دائرة حول الإجابة التي تجدها مناسبة بين 1 و 7. يرجى العلم بأنه لا يوجد أجابة صحيحة أو خاطئة.

العبارة	لا أوافق بشدة	1	2	3	4	5	6	7 أوافق بشدة
1 يوفر المستشفى غالباً معدات تشخيصية وعلاجية جديدة ومميزة للمرضى.	1	2	3	4	5	6	7	
2 يعتبر المستشفى مبتكراً ومبدعاً مقارنة بالمستشفيات الأخرى في السوق.	1	2	3	4	5	6	7	
3 يقدم المستشفى عادة معدات تشخيصية وعلاجية غير متوفرة في المستشفيات الأخرى.	1	2	3	4	5	6	7	
4 يقدم المستشفى معدات تشخيصية وعلاجية مخصصة لتتناسب مع احتياجات المرضى.	1	2	3	4	5	6	7	
5 تتميز المعدات التشخيصية والعلاجية التي يقدمها المستشفى بوظائف وتقنيات خاصة تفوق لها في المستشفيات الأخرى.	1	2	3	4	5	6	7	
6 يقوم المستشفى بتحديث وصيانة المعدات الطبية بطريقة دورية.	1	2	3	4	5	6	7	
7 يعتبر المستشفى مبتكراً ومبدعاً في اجراء الفحوصات التشخيصية.	1	2	3	4	5	6	7	
8 يعتبر المستشفى مبتكراً ومبدعاً في الاجراءات العلاجية.	1	2	3	4	5	6	7	

9	يعتبر المستشفى مبتكراً ومبدعاً في تقديم أطباء وممرضين من ذوي الخبرات والكفاءات.	1	2	3	4	5	6	7
10	يتميز المستشفى بتقديم خدمات طبية وصحية شاملة.	1	2	3	4	5	6	7
11	الخدمات التي يقدمها المستشفى تجعلني مرتاح البال.	1	2	3	4	5	6	7
12	يتميز المستشفى بسرعة التعامل مع شكاوى المرضى.	1	2	3	4	5	6	7
13	يقدم المستشفى خدمات متميزة قبل بدء العلاج مثل خدمة الاستشارات الطبية المجانية.	1	2	3	4	5	6	7
14	يقدم المستشفى خدمات متميزة بعد انتهاء العلاج مثل خدمات الترفيه والحجوزات.	1	2	3	4	5	6	7
15	يقوم المستشفى بتحديث خدمات الإنترنت بشكل فوري ومستمر.	1	2	3	4	5	6	7
16	يتميز المستشفى بتوفير أسعار مناسبة مقارنة بالمستشفيات الأخرى.	1	2	3	4	5	6	7
17	يتميز المستشفى باستخدام وسائل توزيع ابداعية مع المرضى مثل خدمات الرعاية الصحية الإلكترونية والمحمولة.	1	2	3	4	5	6	7
18	يتميز المستشفى عن غيره من المستشفيات بتسويق المستشفى وخدماته من خلال تقديم الهدايا والحسومات.	1	2	3	4	5	6	7
19	يجذب المستشفى مجموعات وجنسيات مختلفة من المرضى على الدوام.	1	2	3	4	5	6	7
20	يتميز المستشفى ببناء علاقات ايجابية مع المرضى.	1	2	3	4	5	6	7
21	يتميز المستشفى بإجراءات تسجيل المرضى عند استخدام وحدات الرعاية المختلفة.	1	2	3	4	5	6	7
22	يتميز المستشفى بإجراءات دخول/خروج المرضى.	1	2	3	4	5	6	7
23	يتميز المستشفى بعنائه بالمرضى وعلاجهم.	1	2	3	4	5	6	7
24	يتميز المستشفى باستخدام وسائل الدفع الإلكترونية.	1	2	3	4	5	6	7

القسم د: العلامة التجارية : يرجى الإشارة الى درجة اتفاقك مع العبارات المذكورة أدناه. ضع دائرة حول الإجابة التي تجدها مناسبة بين 1 و 7. يرجى العلم بأنه لا يوجد أجابة صحيحة أو خاطئة.

العبارة	أوافق بشدة	أوافق	متوسط	لا أوافق	لا أوافق بشدة	أوافق بشدة	
1	أفضل اسم هذا المستشفى على غيره حتى إن كانت المستشفيات الأخرى تقدم خدمات ذات جودة مماثلة لهذا المستشفى.	1	2	3	4	5	6
2	أجد أنه من المنطقي التعامل مع هذا المستشفى مراراً وتكراراً حتى إن كانت المستشفيات الأخرى تقدم خدمات ذات جودة مماثلة لهذا المستشفى.	1	2	3	4	5	6
3	أجد اسم هذا المستشفى أكثر جاذبية من أسماء المستشفيات الأخرى.	1	2	3	4	5	6
4	أعتقد أن قرار اختيار خدمات هذا المستشفى على غيره من المستشفيات هو قرار ذكي.	1	2	3	4	5	6
5	تقتضي استراتيجية المخاطرة المنخفضة شراء خدمات هذا المستشفى على خدمات المستشفيات الأخرى.	1	2	3	4	5	6
6	يوحي اسم هذا المستشفى على تفوقه عن غيره من المستشفيات الأخرى.	1	2	3	4	5	6
7	أعتقد أنه من الذكاء التعامل مع هذا المستشفى حتى إن كانت المستشفيات الأخرى تقدم خدمات ذات جودة مماثلة لهذا المستشفى.	1	2	3	4	5	6
8	أعتقد أنه من الذكاء التعامل مع هذا المستشفى حتى إن كانت المستشفيات الأخرى تقدم خدمات ذات أسعار مماثلة لهذا المستشفى.	1	2	3	4	5	6
9	سوف أختار هذا المستشفى حتى لو لم أكن متأكداً تماماً من تفوقه على غيره من المستشفيات.	1	2	3	4	5	6
10	قد يكون اسم هذا المستشفى هو السبب الرئيسي الذي دفعني للتعامل معه.	1	2	3	4	5	6
11	سوف أختار هذا المستشفى حتى لو أتيت لي فرصة التعامل مع مستشفى آخر يقدم خدمات مماثلة لهذا المستشفى.	1	2	3	4	5	6

القسم هـ: ملف المجيب :

المادة	يرجى وضع علامة (√) عند الخيار المناسب
الجنس	- ذكر
	- أنثى
العمر	- 25 – 18
	- 35 – 26
	- 45 – 36
	- 55 – 46
	- أكثر من 56 عاما
مستوى التعليم	- ثانوية عامة
	- دبلوم
	- بكالوريوس
	- ماجستير
	- دكتوراة
	- أخرى (يرجى التحديد).....
الحالة الإجتماعية	- أعزب/عزباء
	- متزوج/ة
	- مطلق/ة
	- أرمل/ة
	- منفصل/ة
الراتب الشهري بالدولار	- أقل من 1000
	- 2000 – 1001
	- 3000 – 2001
	- أكثر من 3001
طريقة الدفع	- شركة التأمين
	- الحكومة
	- على النفقة الخاصة
	- أخرى (يرجى التحديد).....
بلد المنشأ (الجنسية)	- دول الخليج
	- اليمن
	- سوريا
	- فلسطين
	- ليبيا
	- السودان
	- العراق
	- الجزائر
	- أخرى (يرجى التحديد).....
مرات القدوم للعلاج	- مرة واحدة
	- مرتين وأكثر

**APPENDIX B
PART 4**

FIELD STUDY ARABIC QUESTIONNAIRE

سؤال : هل قدمت الى الاردن بهدف العلاج؟ ☐ نعم ☐ لا

ملاحظة : إذا كانت اجابتك على هذا السؤال "نعم" من فضلك أكمل الإجابة على الاستبيان ادناه.

القسم أ: إدارة العلاقات مع المرضى: يرجى الإشارة الى درجة اتفاقك مع العبارات المذكورة أدناه. ضع دائرة حول الإجابة التي تجدها مناسبة بين 1 و 7. يرجى العلم بأنه لا يوجد أجابة صحيحة أو خاطئة.

العبارة	7	6	5	4	3	2	1
1 طاقم المستشفى متحفز لمساعدة المرضى والاستجابة لهم (من خلال التفاعل ونقاط الاتصال المباشر مع المرضى).	7	6	5	4	3	2	1
2 يوفر هذا المستشفى قنوات تواصل تمكن المرضى و المستشفى من التواصل معا.	7	6	5	4	3	2	1
3 يسعى طاقم المستشفى الى فهم متكامل لاحتياجات المرضى من خلال أخذ معلومات وافية عن المريض.	7	6	5	4	3	2	1
4 طاقم المستشفى على أتم الاستعداد لتقديم الخدمة الفورية للمرضى.	7	6	5	4	3	2	1
5 يتجاوب المستشفى مع اقتراحاتي بشأن تعديل وتطوير الخدمات والمنتجات الصحية والعلاجية.	7	6	5	4	3	2	1
6 يشركني المستشفى في الخدمات الصحية القائمة على التكنولوجيا، مثل تقديم الخدمات الصحية عن طريق الهاتف الخليوي أو شبكة الانترنت.	7	6	5	4	3	2	1
7 يشركني المستشفى بصفة شخصية فيما يتعلق بتطور حالتي الصحية.	7	6	5	4	3	2	1
8 يلتزم المستشفى بإجراء التعديلات اللازمة لتناسب مع احتياجات المرضى.	7	6	5	4	3	2	1
9 يقدم المستشفى اقتراحات للمرضى حول المنتجات والخدمات الصحية والعلاجية.	7	6	5	4	3	2	1
10 يمتلك المستشفى برامج للمحافظة على ولاء المرضى ورضاهم عن الخدمات.	7	6	5	4	3	2	1
11 يمتلك المستشفى برمجيات الحاسوب المناسبة لخدمة المرضى.	7	6	5	4	3	2	1
12 يمتلك المستشفى معدات الحاسوب والأجهزة المناسبة لخدمة المرضى.	7	6	5	4	3	2	1
13 يمتلك المستشفى معلومات كافية عن المرضى متوفرة في جميع نقاط الاتصال.	7	6	5	4	3	2	1
14 يمتلك المستشفى قاعدة بيانات شاملة حول المرضى.	7	6	5	4	3	2	1
15 يستغل طاقم المستشفى تكنولوجيا الحاسوب لبناء علاقات ايجابية مع المرضى.	7	6	5	4	3	2	1
16 عند حدوث مشكله و بغض النظر عن مصدرها، يتحمل المستشفى والمرضى معا المسؤولية في التغلب عليها.	7	6	5	4	3	2	1
17 يعمل المستشفى و المرضى معا في حل مشاكل بعضهما البعض.	7	6	5	4	3	2	1
18 يتحمل المستشفى والمرضى معا مسؤولية انجاز الأمور.	7	6	5	4	3	2	1

القسم ب: جودة الخدمة: يرجى الإشارة الى درجة اتفاقك مع العبارات المذكورة أدناه. ضع دائرة حول الإجابة التي تجدها مناسبة بين 1 و 7. يرجى العلم بأنه لا يوجد أجابة صحيحة أو خاطئة.

العبارة	7	6	5	4	3	2	1	أوافق بشدة
1 يمتلك هذا المستشفى مواد دعائية بصرية جذابة تتناسب مع طبيعة الخدمات الصحية والعلاجية التي يقدمها.	7	6	5	4	3	2	1	
2 يتميز طاقم المستشفى بحسن الهندام والمظهر.	7	6	5	4	3	2	1	
3 يمتلك المستشفى معدات وأجهزة حديثة.	7	6	5	4	3	2	1	
4 يحتفظ المستشفى بسجلات دقيقة وموثقة.	7	6	5	4	3	2	1	
5 يلتزم المستشفى بتقديم الخدمة للمرضى بالموعد المتفق عليه.	7	6	5	4	3	2	1	
6 يحرص المستشفى على تقديم الخدمات الصحية بطريقة صحيحة من أول مرة.	7	6	5	4	3	2	1	
7 يحرص طاقم المستشفى على إخبار المرضى بالضبط عن أوقات تقديم الخدمات الصحية والعلاجية لهم.	7	6	5	4	3	2	1	
8 طاقم المستشفى دائماً على أتم الإستعداد لمساعدة وخدمة المرضى.	7	6	5	4	3	2	1	
9 يعمل طاقم المستشفى على خدمة المرضى وتلبية احتياجاتهم بأي وقت رغم انشغالهم.	7	6	5	4	3	2	1	
10 أنا أشعر بالأمان عند التعامل مع هذا المستشفى.	7	6	5	4	3	2	1	
11 أنا أتق بطاقم المستشفى.	7	6	5	4	3	2	1	
12 يتميز طاقم المستشفى بحسن الإطلاع والمعرفة والخبرة.	7	6	5	4	3	2	1	
13 يتعامل طاقم المستشفى معي بعناية و دفاء.	7	6	5	4	3	2	1	
14 تناسب ساعات عمل المستشفى جميع المرضى.	7	6	5	4	3	2	1	
15 يضع المستشفى مصلحة المرضى في مقدمة اهتمامات الادارة والعاملين.	7	6	5	4	3	2	1	

القسم ج: الابتكار: يرجى الإشارة الى درجة اتفاقك مع العبارات المذكورة أدناه. ضع دائرة حول الإجابة التي تجدها مناسبة بين 1 و 7. يرجى العلم بأنه لا يوجد أجابة صحيحة أو خاطئة.

العبارة	7	6	5	4	3	2	1	أوافق بشدة
1 يعتبر المستشفى مبتكراً ومبدعاً مقارنة بالمستشفيات الأخرى في السوق.	7	6	5	4	3	2	1	
2 يقدم المستشفى عادة معدات تشخيصية وعلاجية غير متوفرة في المستشفيات الأخرى.	7	6	5	4	3	2	1	
3 يقدم المستشفى معدات تشخيصية وعلاجية مخصصة لتناسب مع احتياجات المرضى.	7	6	5	4	3	2	1	
4 تتميز المعدات التشخيصية والعلاجية التي يقدمها المستشفى بوظائف وتقنيات خاصة تفقر لها في المستشفيات الأخرى.	7	6	5	4	3	2	1	
5 يعتبر المستشفى مبتكراً ومبدعاً في اجراء الفحوصات التشخيصية.	7	6	5	4	3	2	1	
6 يعتبر المستشفى مبتكراً ومبدعاً في الاجراءات العلاجية.	7	6	5	4	3	2	1	
7 يعتبر المستشفى مبتكراً ومبدعاً في تقديم أطباء وممرضين من ذوي الخبرات والكفاءات.	7	6	5	4	3	2	1	
8 الخدمات التي يقدمها المستشفى تجعلني مرتاح البال.	7	6	5	4	3	2	1	
9 يتميز المستشفى بسرعة التعامل مع شكاوى المرضى.	7	6	5	4	3	2	1	
10 يقدم المستشفى خدمات متميزة قبل بدء العلاج مثل خدمة الاستشارات الطبية المجانية.	7	6	5	4	3	2	1	
11 يتميز المستشفى بتوفير أسعار مناسبة مقارنة بالمستشفيات الأخرى.	7	6	5	4	3	2	1	

12	يتميز المستشفى باستخدام وسائل توزيع ابداعية مع المرضى مثل خدمات الرعاية الصحية الإلكترونية والمحمولة.	1	2	3	4	5	6	7
13	يتميز المستشفى عن غيره من المستشفيات بتسويق المستشفى وخدماته من خلال تقديم الهدايا والحسومات.	1	2	3	4	5	6	7
14	يجذب المستشفى مجموعات وجنسيات مختلفة من المرضى على الدوام.	1	2	3	4	5	6	7
15	يتميز المستشفى ببناء علاقات ايجابية مع المرضى.	1	2	3	4	5	6	7
16	يتميز المستشفى بإجراءات تسجيل المرضى عند استخدام وحدات الرعاية المختلفة.	1	2	3	4	5	6	7
17	يتميز المستشفى بإجراءات دخول/خروج المرضى.	1	2	3	4	5	6	7
18	يتميز المستشفى بعنايته بالمرضى وعلاجهم.	1	2	3	4	5	6	7

القسم د: العلامة التجارية : يرجى الإشارة الى درجة اتفاقك مع العبارات المذكورة أدناه. ضع دائرة حول الإجابة التي تجدها مناسبة بين 1 و 7. يرجى العلم بأنه لا يوجد أجابة صحيحة أو خاطئة.

العبارة	لا أوافق أبداً	1	2	3	4	5	6	7	أوافق بشدة
1 أجد أنه من المنطقي التعامل مع هذا المستشفى مراراً وتكراراً حتى إن كانت المستشفيات الأخرى تقدم خدمات ذات جودة مماثلة لهذا المستشفى.	1	2	3	4	5	6	7		
2 أجد اسم هذا المستشفى أكثر جاذبية من أسماء المستشفيات الأخرى.	1	2	3	4	5	6	7		
3 أعتقد ان قرار إختيار خدمات هذا المستشفى على غيره من المستشفيات هو قرار ذكي.	1	2	3	4	5	6	7		
4 يوحى اسم هذا المستشفى على تفوقه عن غيره من المستشفيات الأخرى.	1	2	3	4	5	6	7		
5 أعتقد أنه من الذكاء التعامل مع هذا المستشفى حتى إن كانت المستشفيات الأخرى تقدم خدمات ذات أسعار مماثلة لهذا المستشفى.	1	2	3	4	5	6	7		

Universiti Utara Malaysia

القسم هـ: ملف المجيب :

المادة	يرجى وضع علامة (√) عند الخيار المناسب
الجنس	- ذكر
	- أنثى
العمر	- 25 – 18
	- 35 – 26
	- 45 – 36
	- 55 – 46
	- أكثر من 56 عاما
مستوى التعليم	- ثانوية عامة
	- دبلوم
	- بكالوريوس
	- ماجستير
	- دكتوراة
	- أخرى (يرجى التحديد).....
الحالة الإجتماعية	- أعزب/عزباء
	- متزوج/ة
	- مطلق/ة
	- أرمل/ة
	- منفصل/ة
الراتب الشهري بالدولار	- أقل من 1000
	- 2000 – 1001
	- 3000 – 2001
	- أكثر من 3001
طريقة الدفع	- شركة التأمين
	- الحكومة
	- على النفقة الخاصة
	- أخرى (يرجى التحديد).....
بلد المنشأ (الجنسية)	- دول الخليج
	- اليمن
	- سوريا
	- فلسطين
	- ليبيا
	- السودان
	- العراق
	- الجزائر
	- أخرى (يرجى التحديد).....
مرات القدوم للعلاج	- مرة واحدة
	- مرتين وأكثر

APPENDIX C
PART 1

REQUEST TO PARTICIPATE



Dear Director of Jordan Hospital,

I write to seek your support for a research study looking to investigate brand equity drivers in term of patient relationship management, service quality, and innovation in the private hospitals in the Hashemite Kingdom of Jordan from medical tourists' perspective. This study will provide invaluable insights into what constitutes successful brand equity building. The research is being carried by a PhD student at University Utara Malaysia (UUM), Faye Shriedeh, a research student within the Department of Marketing. The success of this research depends very much on your cooperation in this project. The project will cover medical tourists obtaining medical services in this hospital. The questionnaire will typically take from 20 to 25 minutes to complete the questionnaire and within three weeks upon your permission. The survey is comprehensive and will be completed at your business's workplace by a variety of one hundred and eighty two participants of medical tourists. I will summarize the survey results and if you are interested. I will give you a copy of the results by hand to your address. All of the information collected will be kept strictly confidential. The results might also be used for publication purposes. However, every step will be taken to ensure any quotes used will not be identified as coming from you, unless you explicitly give permission for me to do so.

If you have any concerns to know more about this study, please do not hesitate to contact me on

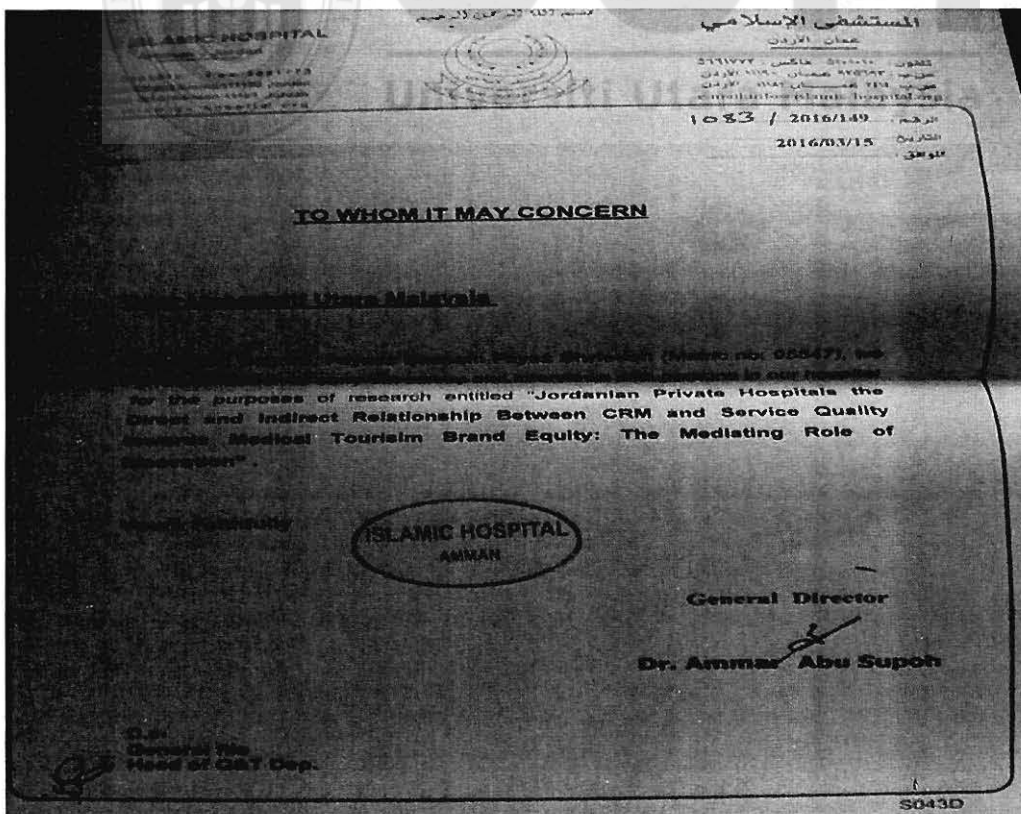
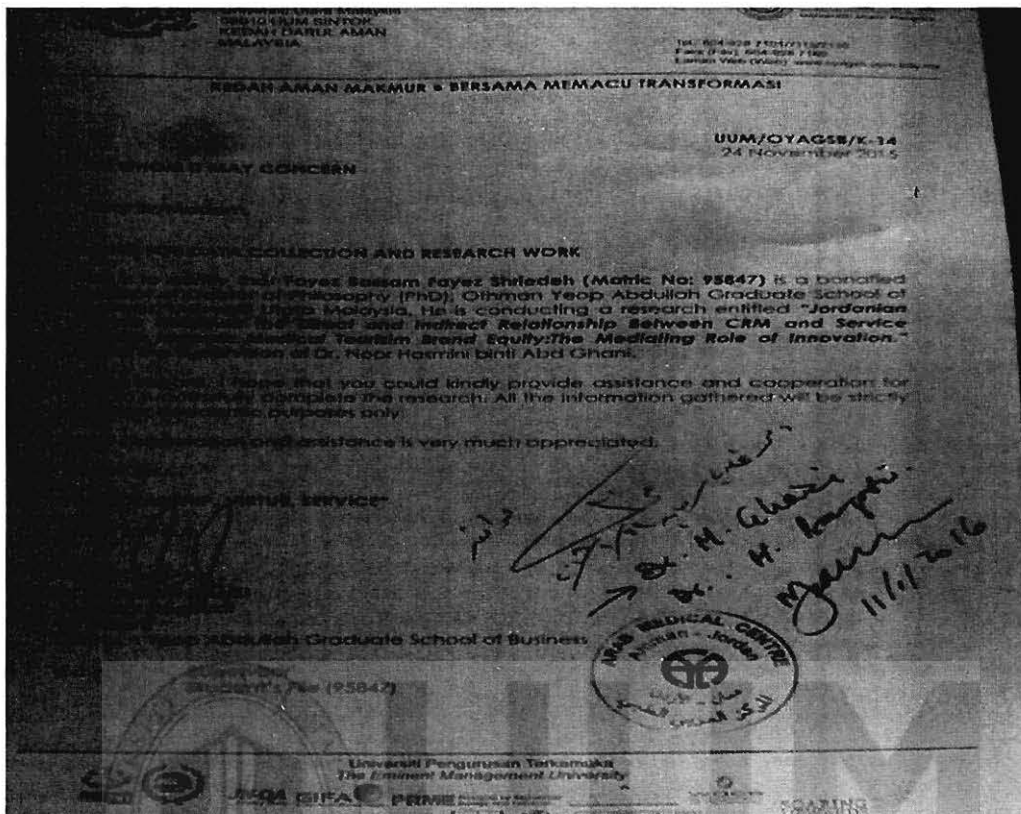
Faye.shriedeh@yahoo.com, or directly at this number: +962797188993.

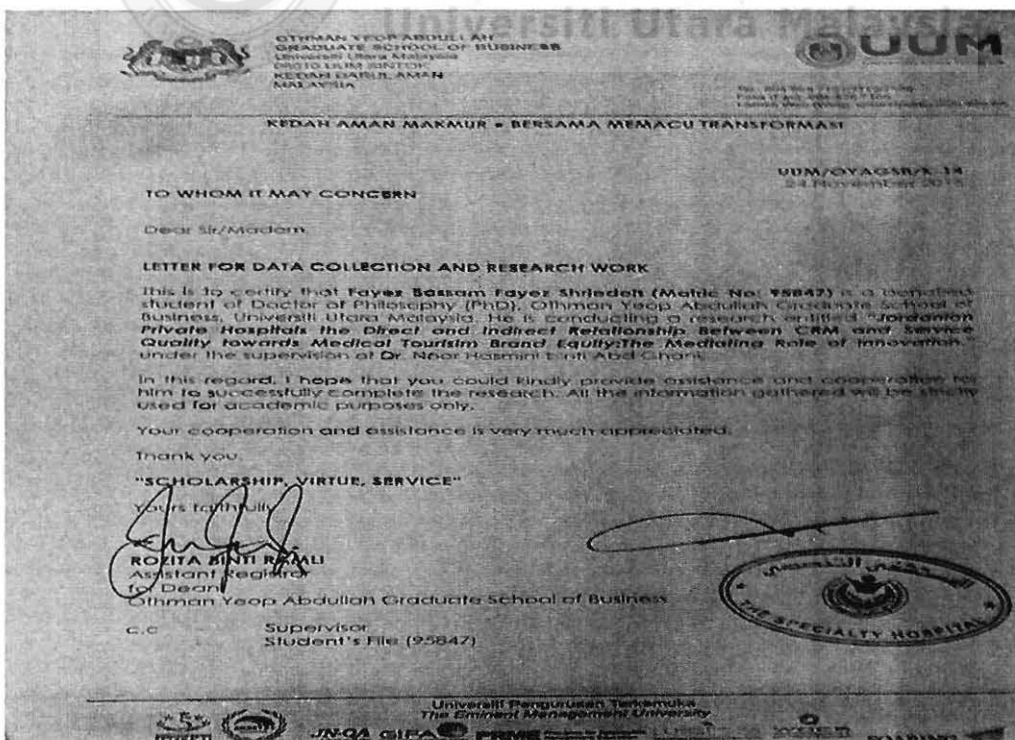
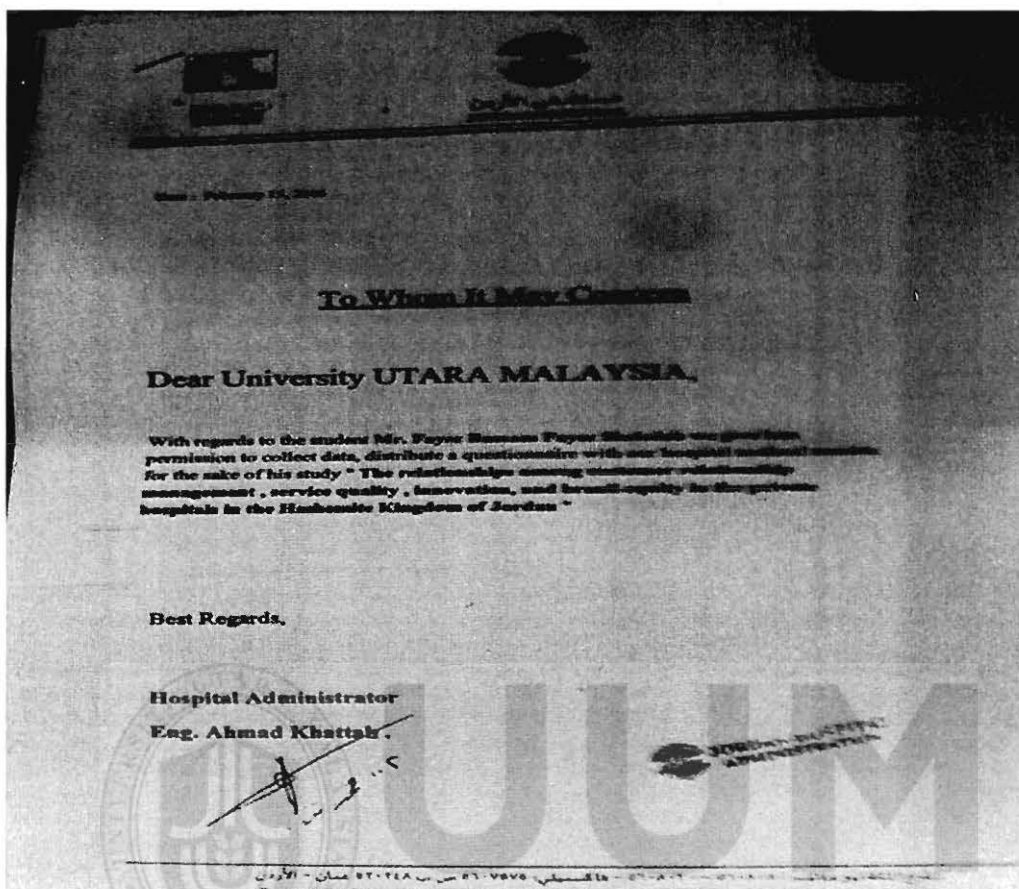
Thank you for your support and assistance.

Faye Bassam Faye Shriedeh

UNIVERSITI UTARA MALAYSIA

06010 SINTOK, KEDAH





APPENDIX D

EXPLORATORY FACTOR ANALYSIS

1. EXPLORATORY FACTOR ANALYSIS ON CRM

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
KM1	4.3793	1.30510	87
KM2	4.7816	1.12504	87
KM3	4.8046	1.23739	87
KM4	4.4828	1.14995	87
CI2	2.3793	1.11273	87
CI4	2.4598	1.14936	87
CI5	2.8161	1.04022	87
LT1	4.4368	1.11753	87
LT2	4.4598	1.14936	87
LT3	4.7126	1.10924	87
TB1	4.138	1.4641	87
TB2	4.1609	1.37142	87
TB3	3.9540	1.31987	87
TB5	4.2529	1.18340	87
TB6	4.2874	1.38016	87
JP1	4.2414	1.32037	87
JP2	3.8391	1.23772	87
JP3	4.0460	1.34604	87

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.824
Bartlett's Test of Sphericity	Approx. Chi-Square
	949.087
	df
	153
	Sig.
	.000

Communalities

	Initial	Extraction
KM1	1.000	.757
KM2	1.000	.850
KM3	1.000	.737
KM4	1.000	.751
CI2	1.000	.813
CI4	1.000	.902
CI5	1.000	.789
LT1	1.000	.782
LT2	1.000	.759
LT3	1.000	.656
TB1	1.000	.755
TB2	1.000	.802
TB3	1.000	.783
TB5	1.000	.746
TB6	1.000	.724
JP1	1.000	.824
JP2	1.000	.747
JP3	1.000	.597

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.373	35.407	35.407	6.373	35.407	35.407	3.793	21.071	21.071
2	2.433	13.517	48.923	2.433	13.517	48.923	3.115	17.305	38.376
3	2.191	12.174	61.097	2.191	12.174	61.097	2.512	13.957	52.333
4	1.547	8.597	69.694	1.547	8.597	69.694	2.207	12.261	64.594
5	1.229	6.826	76.521	1.229	6.826	76.521	2.147	11.927	76.521
6	.656	3.643	80.164						
7	.555	3.086	83.250						
8	.463	2.571	85.821						
9	.413	2.294	88.115						
10	.373	2.070	90.185						
11	.354	1.966	92.151						
12	.288	1.602	93.753						
13	.255	1.418	95.171						

14	.216	1.199	96.370						
15	.200	1.108	97.478						
16	.173	.962	98.440						
17	.165	.917	99.357						
18	.116	.643	100.000						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
TB3	.870				
TB2	.865				
TB1	.849				
TB5	.802				
TB6	.796				
KM2		.878			
KM4		.846			
KM1		.816			
KM3		.806			
CI4			.898		
CI5			.871		
CI2			.852		
LT1				.827	
LT2				.817	
LT3				.726	
JP1					.863
JP2					.830
JP3					.679

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 6 iterations.

2. EXPLORATORY FACTOR ANALYSIS OF SQ

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
TA1	4.5172	1.31946	87
TA3	4.3793	1.41620	87
TA4	4.5172	1.22818	87
RE2	4.6897	1.28778	87
RE3	4.2874	1.38856	87
RE4	4.5402	1.31011	87
RS2	4.7816	1.30674	87
RS3	4.8391	1.18982	87
RS4	4.7701	1.45235	87
AS1	4.9195	1.22207	87
AS2	4.9195	1.31378	87
AS4	4.2759	1.39509	87
EM2	5.0000	1.27589	87
EM4	5.1609	1.11932	87
EM5	4.9080	1.37783	87

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.815
Bartlett's Test of Sphericity	Approx. Chi-Square
	1000.684
	df
	105
	Sig.
	.000

Communalities

	Initial	Extraction
TA1	1.000	.903
TA3	1.000	.884
TA4	1.000	.839
RE2	1.000	.837
RE3	1.000	.859
RE4	1.000	.873
RS2	1.000	.872
RS3	1.000	.885
RS4	1.000	.702

AS1	1.000	.731
AS2	1.000	.782
AS4	1.000	.755
EM2	1.000	.881
EM4	1.000	.919
EM5	1.000	.846

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.464	43.093	43.093	6.464	43.093	43.093	2.707	18.044	18.044
2	2.175	14.498	57.591	2.175	14.498	57.591	2.616	17.438	35.481
3	1.422	9.478	67.069	1.422	9.478	67.069	2.564	17.094	52.575
4	1.363	9.089	76.158	1.363	9.089	76.158	2.447	16.315	68.890
5	1.145	7.632	83.789	1.145	7.632	83.789	2.235	14.899	83.789
6	.538	3.586	87.375						
7	.456	3.040	90.415						
8	.324	2.162	92.577						
9	.264	1.759	94.336						
10	.210	1.401	95.737						
11	.180	1.201	96.938						
12	.150	1.000	97.938						
13	.130	.865	98.803						
14	.104	.693	99.495						
15	.076	.505	100.000						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
TA1	.914				
TA3	.893				
TA4	.879				
RE4		.856			
RE3		.846			
RE2		.817			
EM2			.903		
EM4			.878		
EM5			.770		
RS3				.881	
RS2				.865	
RS4				.762	
AS4					.851
AS2					.800
AS1					.757

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 6 iterations.

3. EXPLORATORY FACTOR ANALYSIS OF INNOVATION[†]

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
PD2	4.7701	1.30919	87
PD3	4.8161	1.45896	87
PD4	4.9885	1.24353	87
PD5	5.2069	1.25881	87
PS1	4.6437	1.62092	87
PS2	4.3908	1.67995	87
PS3	4.4253	1.59674	87
SV2	5.0345	1.37628	87
SV3	5.1494	1.27159	87
SV4	5.0115	1.35109	87
MK1	4.9770	1.32925	87
MK2	5.1264	1.17932	87
MK3	5.0000	1.38933	87
MK4	5.1494	1.30766	87

AD1	5.2184	1.27976	87
AD2	5.2069	1.27715	87
AD3	4.9080	1.46773	87
AD4	5.5632	1.13815	87

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.816
Bartlett's Test of Sphericity	Approx. Chi-Square
	806.065
	df
	153
	Sig.
	.000

Communalities

	Initial	Extraction
PD2	1.000	.740
PD3	1.000	.812
PD4	1.000	.777
PD5	1.000	.689
PS1	1.000	.678
PS2	1.000	.661
PS3	1.000	.791
SV2	1.000	.790
SV3	1.000	.791
SV4	1.000	.698
MK1	1.000	.613
MK2	1.000	.756
MK3	1.000	.740
MK4	1.000	.612
AD1	1.000	.722
AD2	1.000	.663
AD3	1.000	.640
AD4	1.000	.598

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.682	37.123	37.123	6.682	37.123	37.123	3.070	17.055	17.055
2	2.291	12.730	49.853	2.291	12.730	49.853	2.776	15.421	32.477
3	1.474	8.187	58.040	1.474	8.187	58.040	2.580	14.335	46.812
4	1.220	6.780	64.820	1.220	6.780	64.820	2.203	12.237	59.049
5	1.104	6.131	70.952	1.104	6.131	70.952	2.142	11.902	70.952
6	.803	4.462	75.414						
7	.751	4.174	79.588						
8	.596	3.309	82.897						
9	.500	2.780	85.678						
10	.465	2.582	88.260						
11	.407	2.260	90.520						
12	.363	2.014	92.534						
13	.305	1.694	94.228						
14	.282	1.568	95.796						
15	.245	1.362	97.158						
16	.208	1.158	98.315						
17	.155	.864	99.179						
18	.148	.821	100.000						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
PD4	.854				
PD3	.816				
PD2	.812				
PD5	.763				
MK3		.843			
MK2		.790			
MK4		.710			
MK1		.630			
AD3			.777		
AD1			.761		
AD4			.701		
AD2			.611		

SV2				.816	
SV3				.799	
SV4				.749	
PS3					.802
PS2					.713
PS1					.709

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 6 iterations.

4. EXPLORATORY FACTOR ANALYSIS OF OVERALL BRAND EQUITY

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
BE2	4.3793	1.36604	87
BE3	4.0805	1.53425	87
BE4	4.5517	1.39566	87
BE6	4.1149	1.48970	87
BE8	4.2759	1.56777	87

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.819
Bartlett's Test of Sphericity	Approx. Chi-Square	359.302
	df	10
	Sig.	.000

Communalities

	Initial	Extraction
BE2	1.000	.718
BE3	1.000	.761
BE4	1.000	.833
BE6	1.000	.779
BE8	1.000	.769

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.860	77.200	77.200	3.860	77.200	77.200
2	.511	10.221	87.421			
3	.347	6.936	94.357			
4	.152	3.049	97.406			
5	.130	2.594	100.000			

Extraction Method: Principal Component Analysis.



UUM
Universiti Utara Malaysia

APPENDIX E

DATA CODING AND ENTRY

Constructs	Dimension	Item	Item Code	Value	Measure
Customer Relationship Management (CRM)	Knowledge Management (KM)	The employees of this hospital are motivated to help patients in a responsive manner, e.g. through interaction and touch points.	KM1	1-7	Scale
		This hospital provides communication channels to enable interaction between patients and hospital.	KM2	1-7	Scale
		The employees of this hospital fully try to understand the patient's needs via generating a lot of information about me.	KM3	1-7	Scale
		The employees of this hospital are willing to provide prompt service to the patients.	KM4	1-7	Scale
	Customer Involvement (CI)	This hospital is responsive to modifying the products and services according to my suggestions.	CI1	1-7	Scale
		This hospital involves me in technology-based health services such as mobile-based health services, web e-services.	CI2	1-7	Scale
		This hospital involves me directly in the development of my healthcare status.	CI3	1-7	Scale
	Long -term Association (L.T)	This hospital is committed to making adjustments to suit patients' needs.	LT1	1-7	Scale
		This hospital provides suggestions for products and services for patients.	LT2	1-7	Scale
		This hospital has patient loyalty or retention programs.	LT3	1-7	Scale
	Technology based CRM (TB)	This hospital has the right software to serve patients.	TB1	1-7	Scale
		This hospital has the right hardware to serve patients.	TB2	1-7	Scale
		This hospital has adequate information about patients available in every touch point.	TB3	1-7	Scale
		This hospital maintains a comprehensive database of patients.	TB4	1-7	Scale
		The employees of this hospital are able to build relationship with patients through utilization of computer technology.	TB5	1-7	Scale

Constructs	Dimension	Item	Item Code	Value	Measure
	Joint Problem Solving (JP)	No matter who is the source of problem, responsibility is taken by this hospital and patients to overcome the difficulties.	JP1	1-7	Scale
		This hospital works with patients to help solve each other's conflicts.	JP2	1-7	Scale
		The parties are jointly responsible for getting things done.	JP3	1-7	Scale
Service Quality (SQ)	Tangibility (TA)	This hospital has visually appealing materials associated with the service.	TA1	1-7	Scale
		The employees of this hospital are well dressed and appear neat.	TA2	1-7	Scale
		Availability of modern equipment in this hospital.	TA3	1-7	Scale
	Reliability (RE)	This hospital maintains error-free records.	RE1	1-7	Scale
		This hospital provides services at promised times.	RE2	1-7	Scale
		This hospital performs the service right from the first time.	RE3	1-7	Scale
	Responsiveness (RS)	The staff of this hospital tells patients exactly when services will be provided.	RS1	1-7	Scale
		The employees of this hospital are always willing to help patients'.	RS2	1-7	Scale
		The employees of this hospital are never too busy to respond to patients requests'.	RS3	1-7	Scale
	Assurance (AS)	I feel secure in dealing with this hospital.	AS1	1-7	Scale
		I could trust the employees of this hospital.	AS2	1-7	Scale
		The employees of this hospital are knowledgeable.	AS3	1-7	Scale
	Empathy (EM)	The staff of this hospital treats me with warm and caring attitude.	EM1	1-7	Scale
		This hospital does have operating hours convenient to all patients.	EM2	1-7	Scale
		The staff of this hospital has best interests of patients in their heart.	EM3	1-7	Scale

Constructs	Dimension	Item	Item Code	Value	Measure
Innovation	Product Innovation (PD)	This hospital is highly innovative compared to other hospitals in the market.	PD1	1-7	Scale
		This hospital often launches diagnostic and treatment equipments not available in the market.	PD2	1-7	Scale
		This hospital launches personalized diagnostic and treatment equipments according to the patient needs.	PD3	1-7	Scale
		This hospital diagnostic and treatment equipments have functions and features other hospitals lack.	PD4	1-7	Scale
	Process Innovation (PS)	This hospital provides innovation in diagnostic procedures.	PS1	1-7	Scale
		This hospital provides innovation in treatment processes.	PS2	1-7	Scale
		This hospital provides skills and experience medical staff.	PS3	1-7	Scale
	Service Innovation (SV)	This hospital's services put my mind at ease.	SV1	1-7	Scale
		This hospital is particularly fast when handling patient complaints.	SV2	1-7	Scale
		This hospital provides innovative services before treatment such as free consulting services.	SV3	1-7	Scale
	Marketing Innovation (MK)	This hospital often leads over other hospitals in launching innovative prices.	MK1	1-7	Scale
		This hospital provides innovative distributing methods to the market such as electronic health and mobile health.	MK2	1-7	Scale
		This hospital leads over other hospitals in promoting the hospital such as gifts and special discounts.	MK3	1-7	Scale
		This hospital continually attracts different patient groups.	MK4	1-7	Scale
	Administrative Innovation (AD)	This hospital is innovative in building patient relationship.	AD1	1-7	Scale
		This hospital is innovative in registration process when using different care units.	AD2	1-7	Scale
		This hospital is innovative in admission/discharges process.	AD3	1-7	Scale
		This hospital is innovative in patient care process.	AD4	1-7	Scale

Constructs	Item	Item Code	Value	Measure
Overall Brand Equity (BE)	It makes sense to frequently choose this hospital, even if another hospital has the same services.	BE1	1-7	Scale
	The name of this hospital is more attractive to me than any other hospital name.	BE2	1-7	Scale
	It seems smarter to choose the services of this hospital rather than the services of any other hospital.	BE3	1-7	Scale
	The name of this hospital implies something superior to other hospitals.	BE4	1-7	Scale
	It is smarter to choose this hospital, even if another hospital has the same quality as this hospital.	BE5	1-7	Scale
Participants' Demographic Factors	Gender		1-2	Scale
	Age		1-5	Scale
	Education		1-6	Scale
	Marital status		1-5	Scale
	Monthly income		1-4	Scale
	Payment type		1-4	Scale
	Country of origin (COO)		1-9	Scale
	Frequency of visit		1-2	Scale

APPENDIX F

FREQUENCY STATISTICS OF RESPONDENTS

Frequency Table

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	302	61.5	61.5	61.5
Female	189	38.5	38.5	100.0
Total	491	100.0	100.0	

Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-25	63	12.8	12.8	12.8
26-35	138	28.1	28.1	40.9
36-45	151	30.8	30.8	71.7
46-55	78	15.9	15.9	87.6
Over 56	61	12.4	12.4	100.0
Total	491	100.0	100.0	

Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid High School	52	10.6	10.6	10.6
Diploma	108	22.0	22.0	32.6
Bachelor	233	47.5	47.5	80.0
Master	76	15.5	15.5	95.5
PhD	21	4.3	4.3	99.8
Others	1	.2	.2	100.0
Total	491	100.0	100.0	

Marital Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Single	104	21.2	21.2	21.2
Married	322	65.6	65.6	86.8
Divorced	29	5.9	5.9	92.7
Widowed	30	6.1	6.1	98.8
Separated	6	1.2	1.2	100.0
Total	491	100.0	100.0	

Monthly Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Below 1000 USD	272	55.4	55.4	55.4
1001-2000 USD	137	27.9	27.9	83.3
Valid 2001-3000 USD	55	11.2	11.2	94.5
Over 3001 USD	27	5.5	5.5	100.0
Total	491	100.0	100.0	

Payment Type

	Frequency	Percent	Valid Percent	Cumulative Percent
Insurance	131	26.7	26.7	26.7
Government	191	38.9	38.9	65.6
Valid By own	123	25.1	25.1	90.6
Others	46	9.4	9.4	100.0
Total	491	100.0	100.0	

COO

	Frequency	Percent	Valid Percent	Cumulative Percent
Yemen	148	30.1	30.1	30.1
Gulf Countries	26	5.3	5.3	35.4
Libya	126	25.7	25.7	61.1
Palestine	50	10.2	10.2	71.3
Sudan	31	6.3	6.3	77.6
Valid Algeria	44	9.0	9.0	86.6
Iraq	20	4.1	4.1	90.6
Syria	26	5.3	5.3	95.9
Others	20	4.1	4.1	100.0
Total	491	100.0	100.0	

Visit Frequency

	Frequency	Percent	Valid Percent	Cumulative Percent
One time	301	61.3	61.3	61.3
Valid 2 times and above	190	38.7	38.7	100.0
Total	491	100.0	100.0	

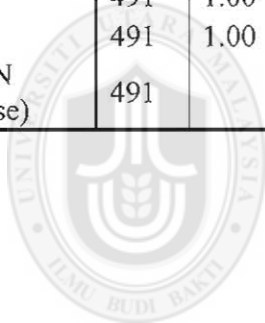
APPENDIX G

DESCRIPTIVE STATISTICS OF MEASUREMENT ITEMS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
KM1	491	1.00	7.00	4.2851	1.39246
KM2	491	1.00	7.00	4.1752	1.27530
KM3	491	1.00	7.00	4.3503	1.37005
KM4	491	1.00	7.00	4.2749	1.45538
CI1	491	1.00	7.00	4.0916	1.43062
CI2	491	1.00	7.00	3.7149	1.34929
CI3	491	1.00	7.00	3.5723	1.34026
LT1	491	1.00	7.00	4.1670	1.43307
LT2	491	1.00	7.00	4.0998	1.37923
LT3	491	1.00	7.00	4.0754	1.36741
TB1	491	1.00	7.00	4.6171	1.50646
TB2	491	1.00	7.00	4.6069	1.58252
TB3	491	1.00	7.00	4.3177	1.44451
TB4	491	1.00	7.00	3.9084	1.37831
TB5	491	1.00	7.00	4.1914	1.38800
JP1	491	1.00	7.00	4.3442	1.43487
JP2	491	1.00	7.00	4.2281	1.36161
JP3	491	1.00	7.00	4.2464	1.27550
TA1	491	1.00	7.00	4.6497	1.82150
TA2	491	1.00	7.00	4.6802	1.86416
TA3	491	1.00	7.00	4.5234	1.70622
RE1	491	1.00	7.00	4.8248	1.90752
RE2	491	1.00	7.00	4.8024	1.91548
RE3	491	1.00	7.00	5.0102	1.91287
RS1	491	1.00	7.00	4.1976	1.86364
RS2	491	1.00	7.00	4.4623	1.84172
RS3	491	1.00	7.00	4.8187	1.89460
AS1	491	1.00	7.00	4.6904	2.01471
AS2	491	1.00	7.00	4.4705	1.97862
AS3	491	1.00	7.00	4.5825	1.90991
EM1	491	1.00	7.00	4.5458	1.94921
EM2	491	1.00	7.00	4.6130	1.89439
EM3	491	1.00	7.00	4.7576	2.05046
PD1	491	1.00	7.00	4.6619	1.49685
PD2	491	1.00	7.00	4.3055	1.46397
PD3	491	1.00	7.00	4.9328	1.43341
PD4	491	1.00	7.00	4.7739	1.34309

PS1	491	1.00	7.00	4.3992	1.49950
PS2	491	1.00	7.00	4.4460	1.60822
PS3	491	1.00	7.00	4.3809	1.55562
SV1	491	1.00	7.00	4.5132	1.60399
SV2	491	1.00	7.00	4.5947	1.61520
SV3	491	1.00	7.00	4.7821	1.47197
MK1	491	1.00	7.00	4.4033	1.50655
MK2	491	1.00	7.00	4.4338	1.83537
MK3	491	1.00	7.00	4.3870	1.66137
MK4	491	1.00	7.00	4.2729	1.62596
AD1	491	1.00	7.00	4.6151	1.50119
AD2	491	1.00	7.00	4.3747	1.53533
AD3	491	1.00	7.00	4.7271	1.93751
AD4	491	1.00	7.00	4.3075	1.63667
BE1	491	1.00	7.00	5.3707	1.29563
BE2	491	1.00	7.00	5.4562	1.17091
BE3	491	1.00	7.00	5.3890	1.20940
BE4	491	1.00	7.00	5.3666	1.15707
BE5	491	1.00	7.00	5.4155	1.27874
Valid N (listwise)	491				



Universiti Utara Malaysia

APPENDIX H PART 1

NON RESPONSE BIAS FOR STUDY CONSTRUCTS BETWEEN MORNING AND AFTERNOON PERIOD

Group Statistics

Construct	Survey Time	N	Mean	Std. Deviation	Std. Error Mean
CRM	Morning	297	4.2039	0.92040	.05341
	Afternoon	157	4.1637	0.96683	.07716
KM	Morning	297	4.3451	1.09726	.06367
	Afternoon	157	4.2707	1.15191	.09193
CI	Morning	297	3.8171	1.19237	.06919
	Afternoon	157	3.7983	1.21468	.09694
L.T	Morning	297	4.1425	1.16710	.06772
	Afternoon	157	4.0786	1.23525	.09858
TB	Morning	297	4.3657	1.10992	.06440
	Afternoon	157	4.3758	1.14093	.09106
JP	Morning	297	4.3490	1.15264	.06688
	Afternoon	157	4.2951	1.20005	.09577
SQ	Morning	297	4.7522	1.45270	.08429
	Afternoon	157	4.6968	1.47454	.11768
TA	Morning	297	4.7598	1.60492	.09313
	Afternoon	157	4.6476	1.65304	.13193
RE	Morning	297	4.9944	1.70551	.09896
	Afternoon	157	4.9023	1.74934	.13961
RS	Morning	297	4.5903	1.45921	.08467
	Afternoon	157	4.5796	1.47009	.11733
AS	Morning	297	4.6599	1.77316	.10289
	Afternoon	157	4.6369	1.75224	.13984
EM	Morning	297	4.7565	1.74161	.10106
	Afternoon	157	4.7176	1.74237	.13906
Innovation	Morning	297	4.6068	1.08721	.06309
	Afternoon	157	4.4897	1.20099	.09585
PD	Morning	297	4.7786	1.13529	.06588
	Afternoon	157	4.5573	1.22372	.09766
PS	Morning	297	4.4837	1.29904	.07538
	Afternoon	157	4.3907	1.39248	.11113
SV	Morning	297	4.6936	1.35761	.07878
	Afternoon	157	4.6263	1.45167	.11586
MK	Morning	297	4.4537	1.27267	.07385
	Afternoon	157	4.3997	1.34922	.10768
AD	Afternoon	297	4.6246	1.13975	.06614
	Morning	157	4.4745	1.29012	.10296
BE	Morning	297	5.4862	0.99328	.05764
	Afternoon	157	5.4268	1.07706	.08596

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
CRM	1	0.919	.338	.435	452	.664	.04019	.09243	-.14145	.22183
	2			.428	304.446	.669	.04019	.09384	-.14447	.22485
KM	1	0.593	.441	.676	452	.500	.07442	.11016	-.14207	.29091
	2			.665	304.607	.506	.07442	.11183	-.14563	.29447
CI	1	0.342	.559	.158	452	.874	.01876	.11842	-.21396	.25148
	2			.157	312.651	.875	.01876	.11910	-.21558	.25310
L.T	1	0.960	.328	.544	452	.586	.06398	.11753	-.16698	.29495
	2			.535	302.473	.593	.06398	.11960	-.17138	.29934
TB	1	0.432	.511	-.092	452	.927	-.01014	.11059	-.22746	.20719
	2			-.091	310.212	.928	-.01014	.11153	-.22959	.20931
JP	1	0.679	.411	.467	452	.640	.05393	.11537	-.17280	.28066
	2			.462	306.801	.645	.05393	.11682	-.17593	.28379
SQ	1	0.096	.757	.384	452	.701	.05537	.14409	-.22780	.33854
	2			.383	313.633	.702	.05537	.14476 ^a	-.22944	.34019
TA	1	0.132	.717	.702	452	.483	.11226	.16002	-.20221	.42673
	2			.695	309.676	.487	.11226	.16148	-.20548	.43001
RE	1	0.772	.380	.542	452	.588	.09205	.16979	-.24163	.42574
	2			.538	310.798	.591	.09205	.17113	-.24467	.42877
RS	1	0.073	.786	.074	452	.941	.01073	.14436	-.27296	.29442
	2			.074	315.682	.941	.01073	.14469	-.27395	.29541
AS	1	0.009	.923	.132	452	.895	.02299	.17425	-.31946	.36544
	2			.132	321.027	.895	.02299	.17362	-.31858	.36456
EM	1	0.034	.854	.226	452	.821	.03883	.17188	-.29894	.37661
	2			.226	317.609	.821	.03883	.17190	-.29937	.37704
Innovation	1	2.654	.104	1.053	452	.293	.11714	.11128	-.10155	.33584
	2			1.021	291.595	.308	.11714	.11475	-.10869	.34298
PD	1	1.179	.278	1.922	452	.055	.22129	.11511	-.00492	.44751
	2			1.878	297.760	.061	.22129	.11780	-.01054	.45313
PS	1	0.868	.352	.708	452	.479	.09307	.13144	-.16523	.35137
	2			.693	299.183	.489	.09307	.13428	-.17119	.35733
SV	1	1.263	.262	.490	452	.624	.06728	.13723	-.20242	.33697
	2			.480	299.820	.631	.06728	.14010	-.20843	.34298

MK	1	0.789	.375	.421	452	.674	.05402	.12824	-.19799	.30603
	2			.414	302.040	.679	.05402	.13057	-.20292	.31096
AD	1	4.524	.054	1.274	452	.203	.15006	.11780	-.08144	.38155
	2			1.226	285.652	.221	.15006	.12237	-.09081	.39092
BE	1	3.807	.052	.589	452	.556	.05944	.10094	-.13893	.25781
	2			.574	296.243	.566	.05944	.10349	-.14423	.26312

1 Equal Variance Assumed

2 Equal Variance not Assumed



UUM
Universiti Utara Malaysia

APPENDIX H PART 2

NON RESPONSE BIAS FOR DEMOGRAPHIC FACTORS BETWEEN MORNING AND AFTERNOON PERIOD

Group Statistics

Survey time		N	Mean	Std. Deviation	Std. Error Mean
Gender	Morning	297	1.3838	.48714	.02827
	Afternoon	157	1.4268	.49619	.03960
Age	Morning	297	2.8384	1.20282	.06979
	Afternoon	157	2.9809	1.23242	.09836
Education	Morning	297	2.8114	1.00243	.05817
	Afternoon	157	2.8599	.97045	.07745
Marital Status	Morning	297	1.9731	.75289	.04369
	Afternoon	157	2.0446	.84992	.06783
Monthly Income	Morning	297	1.7205	.90756	.05266
	Afternoon	157	1.6051	.79063	.06310
Payment Type	Morning	297	2.0909	.93097	.05402
	Afternoon	157	2.1274	.94548	.07546
COO	Morning	297	3.5926	2.35649	.13674
	Afternoon	157	3.3057	2.37957	.18991
Visit Frequency	Morning	297	1.3704	.48372	.02807
	Afternoon	157	1.3312	.47215	.03768

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
									Lower Upper
Gender	1	2.658	.104	-0.887	452	.376	-.04291	.04838	-.13799 .05216
	2			-0.882	312.686	.378	-.04291	.04865	-.13864 .05282
Age	1	0.131	0.7179	-1.191	452.000	.234	-.14251	.11970	-.37775 .09273
	2			-1.182	311.085	.238	-.14251	.12060	-.37981 .09480
Education	1	1.809	0.1793	-.495	452.000	.621	-.04842	.09784	-.24069 .14384
	2			-.500	326.812	.617	-.04842	.09686	-.23897 .14212

Marital Status	1	2.829	0.0933	-.920	452.000	.358	-.07152	.07773	-.22427	.08123
	2			-.886	286.301	.376	-.07152	.08068	-.23033	.08728
Monthly Income	1	3.44	0.0643	1.346	452.000	.179	.11544	.08575	-.05307	.28395
	2			1.405	357.575	.161	.11544	.08219	-.04619	.27708
Payment Type	1	0.021	0.886	-.395	452.000	.693	-.03648	.09236	-.21798	.14503
	2			-.393	313.487	.695	-.03648	.09280	-.21907	.14611
COO	1	0.001	0.9774	1.230	452.000	.220	.28686	.23331	-.17165	.74537
	2			1.226	315.048	.221	.28686	.23401	-.17357	.74729
Visit Frequency	1	2.942	0.087	.827	452.000	.409	.03916	.04734	-.05387	.13219
	2			.833	324.486	.405	.03916	.04699	-.05328	.13160

1 Equal Variance Assumed

2 Equal Variance not Assumed



UUM
Universiti Utara Malaysia

APPENDIX H PART 3

NON RESPONSE BIAS FOR STUDY CONSTRUCTS BETWEEN FIRST TIME AND REPEAT TIME MEDICAL TOURISTS

Group Statistics

Construct	Survey Time	N	Mean	Std. Deviation	Std. Error Mean
CRM	One time	292	4.1605	0.93276	.05459
	2 times and above	162	4.2432	0.94193	.07401
KM	One time	292	4.3245	1.11062	.06499
	2 times and above	162	4.3102	1.12834	.08865
CI	One time	292	3.7409	1.19221	.06977
	2 times and above	162	3.9362	1.20416	.09461
L.T	One time	292	4.1073	1.20006	.07023
	2 times and above	162	4.1440	1.17536	.09235
TB	One time	292	4.3774	1.12536	.06586
	2 times and above	162	4.3543	1.11216	.08738
JP	One time	292	4.2523	1.13800	.06660
	2 times and above	162	4.4712	1.21166	.09520
SQ	One time	292	4.7372	1.42977	.08367
	2 times and above	162	4.7255	1.51447	.11899
TA	One time	292	4.7192	1.57839	.09237
	2 times and above	162	4.7243	1.69950	.13353
RE	One time	292	4.9829	1.68277	.09848
	2 times and above	162	4.9259	1.78831	.14050
RS	One time	292	4.5811	1.45385	.08508
	2 times and above	162	4.5967	1.47929	.11622
AS	One time	292	4.6553	1.77050	.10361
	2 times and above	162	4.6461	1.75783	.13811
EM	One time	292	4.7477	1.74202	.10194
	2 times and above	162	4.7346	1.74184	.13685
Innovation	One time	292	4.5075	1.11490	.06524
	2 times and above	162	4.6724	1.14683	.09010
PD	One time	292	4.6284	1.15088	.06735
	2 times and above	162	4.8349	1.19593	.09396
PS	One time	292	4.3870	1.31799	.07713
	2 times and above	162	4.5679	1.35127	.10617
SV	One time	292	4.6119	1.32962	.07781
	2 times and above	162	4.7757	1.49017	.11708
MK	One time	292	4.3930	1.28979	.07548
	2 times and above	162	4.5108	1.31444	.10327
AD	One time	292	4.5171	1.21175	.07091
	2 times and above	162	4.6728	1.16005	.09114
BE	One time	292	5.4253	1.02828	.06018
	2 times and above	162	5.5383	1.01033	.07938

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
CRM	1	0.002	.967	-.902	452	.367	-.08272	.09170	-.26293	.09749
	2			-.900	329.824	.369	-.08272	.09196	-.26362	.09818
KM	1	0.057	.812	.131	452	.896	.01430	.10943	-.20074	.22935
	2			.130	328.142	.897	.01430	.10992	-.20194	.23054
CI	1	0.039	.844	-1.667	452	.096	-.19535	.11722	-.42570	.03501
	2			-1.662	329.769	.098	-.19535	.11755	-.42659	.03590
L.T	1	0.009	.926	-.315	452	.753	-.03673	.11671	-.26609	.19263
	2			-.317	338.450	.752	-.03673	.11602	-.26493	.19148
TB	1	0.165	.685	.210	452	.834	.02308	.10979	-.19268	.23884
	2			.211	335.893	.833	.02308	.10942	-.19215	.23831
JP	1	0.999	.318	-1.918	452	.056	-.21891	.11411	-.44316	.00534
	2			-1.884	315.358	.060	-.21891	.11618	-.44749	.00967
SQ	1	2.817	.094	.082	452	.935	.01170	.14308	-.26949	.29289
	2			.080	316.737	.936	.01170	.14546	-.27449	.29789
TA	1	3.751	.053	-.032	452	.974	-.00510	.15896	-.31749	.30729
	2			-.031	312.381	.975	-.00510	.16236	-.32456	.31436
RE	1	2.412	.121	.338	452	.736	.05695	.16861	-.27441	.38831
	2			.332	315.860	.740	.05695	.17158	-.28063	.39453
RS	1	0.185	.668	-.109	452	.913	-.01566	.14332	-.29732	.26600
	2			-.109	327.718	.914	-.01566	.14404	-.29901	.26770
AS	1	0.020	.887	.053	452	.958	.00916	.17301	-.33084	.34916
	2			.053	334.588	.958	.00916	.17265	-.33046	.34878
EM	1	0.111	.739	.077	452	.939	.01315	.17065	-.32222	.34852
	2			.077	332.595	.939	.01315	.17065	-.32254	.34884
Innovation	1	0.006	.939	-1.495	452	.136	-.16495	.11035	-.38181	.05191
	2			-1.483	324.708	.139	-.16495	.11125	-.38380	.05390
PD	1	0.088	.767	-1.806	452	.072	-.20645	.11434	-.43115	.01825
	2			-1.786	321.921	.075	-.20645	.11561	-.43389	.02099
PS	1	0.060	.807	-1.389	452	.166	-.18091	.13029	-.43696	.07513
	2			-1.379	325.616	.169	-.18091	.13123	-.43907	.07724
SV	1	0.964	.327	-1.204	452	.229	-.16385	.13607	-.43126	.10356
	2			-1.166	302.033	.245	-.16385	.14058	-.44048	.11279

MK	1	0.089	.766	-.926	452	.355	-.11782	.12722	-.36784	.13220
	2			-.921	327.278	.358	-.11782	.12791	-.36946	.13382
AD	1	0.323	.570	-1.332	452	.184	-.15572	.11693	-.38552	.07408
	2			-1.348	344.979	.178	-.15572	.11548	-.38285	.07142
BE	1	0.470	.493	-1.128	452	.260	-.11293	.10011	-.30968	.08382
	2			-1.134	337.544	.258	-.11293	.09961	-.30886	.08300

1 Equal Variance Assumed

2 Equal Variance not Assumed



UUM
Universiti Utara Malaysia

APPENDIX I

NORMALITY TEST

Descriptive Statistics (SPSS)

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
KM1	454	.444	.115	-.055	.229
KM2	454	.487	.115	.425	.229
KM3	454	.403	.115	-.130	.229
KM4	454	.249	.115	-.240	.229
CI1	454	.360	.115	-.260	.229
CI2	454	.527	.115	.142	.229
CI3	454	.689	.115	.163	.229
LT1	454	.078	.115	-.259	.229
LT2	454	.164	.115	-.072	.229
LT3	454	.189	.115	-.183	.229
TB1	454	.082	.115	-.399	.229
TB2	454	.188	.115	-.831	.229
TB3	454	.283	.115	-.396	.229
TB4	454	.359	.115	-.118	.229
TB5	454	.185	.115	-.254	.229
JP1	454	.066	.115	-.310	.229
JP2	454	.058	.115	-.175	.229
JP3	454	-.007	.115	.140	.229
TA1	454	-.176	.115	-1.177	.229
TA2	454	-.174	.115	-1.305	.229
TA3	454	-.172	.115	-.970	.229
RE1	454	-.211	.115	-1.417	.229
RE2	454	-.224	.115	-1.369	.229
RE3	454	-.345	.115	-1.369	.229
RS1	454	.121	.115	-1.253	.229
RS2	454	-.036	.115	-1.097	.229
RS3	454	-.245	.115	-1.317	.229
AS1	454	-.151	.115	-1.459	.229
AS2	454	-.019	.115	-1.390	.229
AS3	454	-.074	.115	-1.219	.229
EM1	454	-.064	.115	-1.426	.229
EM2	454	-.084	.115	-1.337	.229
EM3	454	-.178	.115	-1.590	.229
PD1	454	-.631	.115	.121	.229
PD2	454	-.418	.115	-.225	.229

PD3	454	-.610	.115	.136	.229
PD4	454	-.765	.115	1.081	.229
PS1	454	-.662	.115	.418	.229
PS2	454	-.713	.115	.089	.229
PS3	454	-.590	.115	-.146	.229
SV1	454	-.569	.115	-.103	.229
SV2	454	-.673	.115	-.002	.229
SV3	454	-.862	.115	.584	.229
MK1	454	-.705	.115	.302	.229
MK2	454	-.040	.115	-1.079	.229
MK3	454	-.685	.115	-.078	.229
MK4	454	-.502	.115	-.232	.229
AD1	454	-.668	.115	.186	.229
AD2	454	-.561	.115	.003	.229
AD3	454	-.252	.115	-1.324	.229
AD4	454	-.561	.115	-.141	.229
BE1	454	-.878	.115	-.026	.229
BE2	454	-.991	.115	.291	.229
BE3	454	-.874	.115	-.195	.229
BE4	454	-.969	.115	-.160	.229
BE5	454	-1.016	.115	.076	.229
Valid N (listwise)	454				

Assessment of Normality (AMOS)

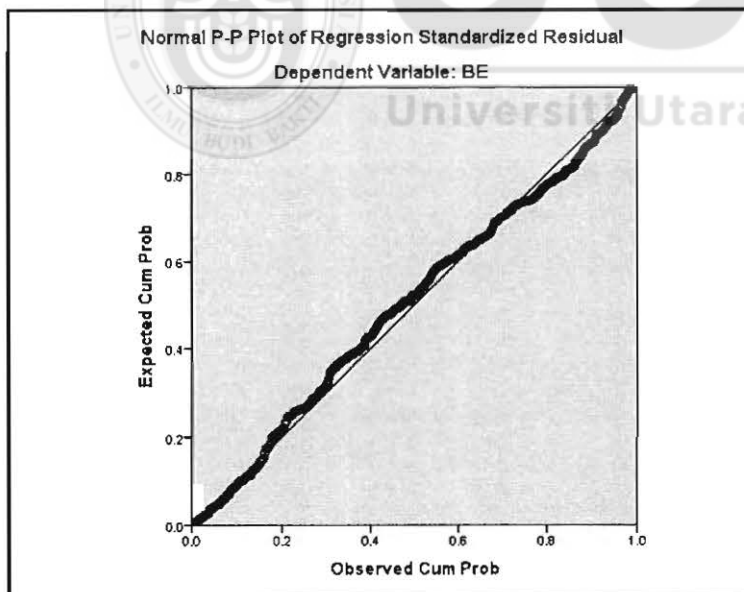
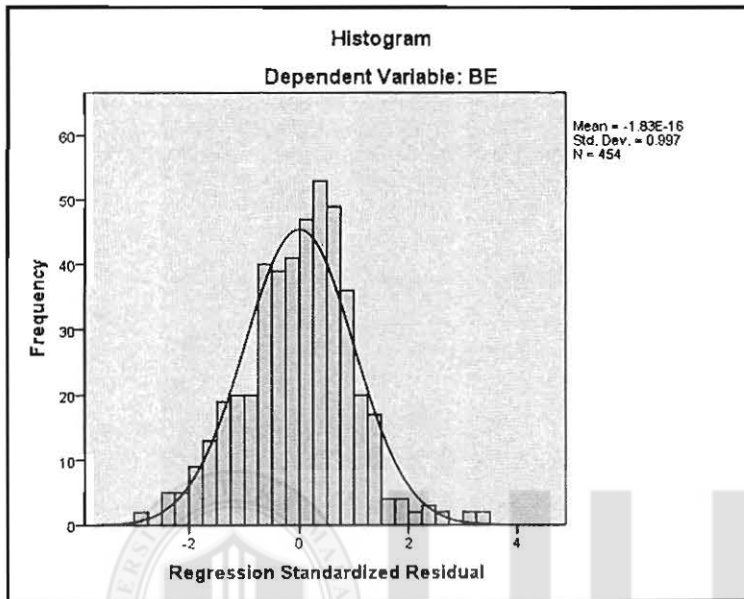
Variable	skew	c.r.	kurtosis	c.r.
KM1	0.443	3.851	-0.068	-0.294
KM2	0.476	4.142	0.416	1.807
KM3	0.404	3.512	-0.122	-0.533
KM4	0.265	2.306	-0.255	-1.111
CI1	0.360	3.132	-0.259	-1.125
CI2	0.545	4.743	0.144	0.626
CI3	0.680	5.919	0.158	0.686
LT1	0.088	0.763	-0.261	-1.134
LT2	0.188	1.637	-0.074	-0.322
LT3	0.201	1.752	-0.209	-0.910
TB1	0.109	0.949	-0.447	-1.943
TB2	0.184	1.601	-0.841	-3.660
TB3	0.280	2.438	-0.398	-1.732
TB4	0.367	3.192	-0.110	-0.480
TB5	0.174	1.516	-0.248	-1.080
JP1	0.064	0.559	-0.311	-1.353 ^t

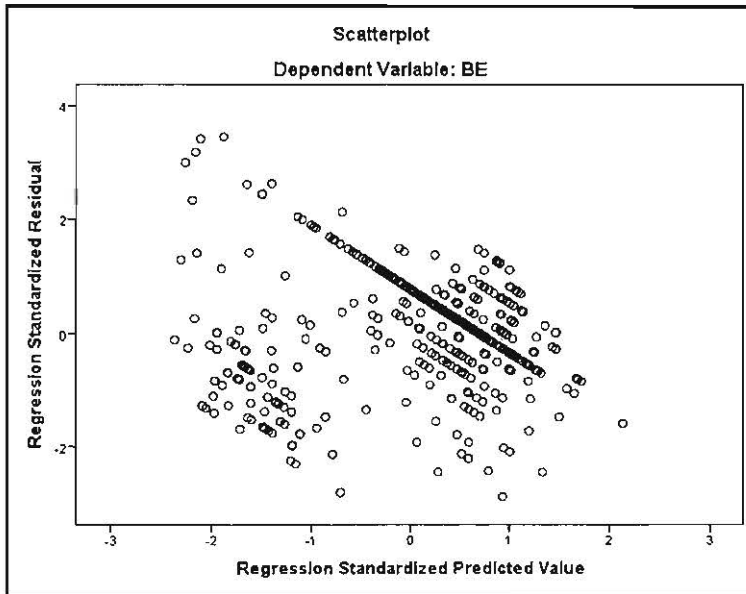
JP2	0.051	0.441	-0.164	-0.715
JP3	-0.023	-0.198	0.147	0.639
TA1	-0.191	-1.662	-1.177	-5.117
TA2	-0.183	-1.591	-1.3	-5.655
TA3	-0.178	-1.546	-0.978	-4.254
RE1	-0.23	-2.002	-1.403	-6.104
RE2	-0.24	-2.086	-1.359	-5.909
RE3	-0.357	-3.108	-1.351	-5.875
RS1	0.103	0.899	-1.26	-5.48
RS2	-0.05	-0.433	-1.097	-4.771
RS3	-0.253	-2.204	-1.31	-5.698
AS1	-0.153	-1.333	-1.456	-6.333
AS2	-0.027	-0.232	-1.388	-6.035
AS3	-0.08	-0.693	-1.216	-5.287
EM1	-0.079	-0.691	-1.426	-6.2
EM2	-0.097	-0.847	-1.332	-5.795
EM3	-0.185	-1.605	-1.581	-6.875
PD1	-0.643	-5.59	0.14	0.609
PD2	-0.406	-3.533	-0.238	-1.034
PD3	-0.623	-5.42	0.171	0.743
PD4	-0.749	-6.515	1.057	4.598
PS1	-0.673	-5.856	0.419	1.822
PS2	-0.728	-6.336	0.119	0.518
PS3	-0.611	-5.317	-0.125	-0.542
SV1	-0.577	-5.017	-0.08	-0.349
SV2	-0.674	-5.865	-0.005	-0.022
SV3	-0.868	-7.551	0.594	2.584
MK1	-0.713	-6.201	0.318	1.382
MK2	-0.044	-0.379	-1.082	-4.704
MK3	-0.691	-6.013	-0.080	-0.350
MK4	-0.503	-4.379	-0.222	-0.967
AD1	-0.669	-5.821	0.193	0.839
AD2	-0.567	-4.93	0.008	0.033
AD3	-0.262	-2.275	-1.316	-5.723
AD4	-0.573	-4.989	-0.124	-0.538
BE1	-0.879	-7.645	-0.013	-0.056
BE2	-1.001	-8.703	0.317	1.379
BE3	-0.873	-7.593	-0.186	-0.807
BE4	-0.975	-8.483	-0.14	-0.61
BE5	-1.007	-8.762	0.055	0.238
Multivariate			311.642	41.194

APPENDIX J

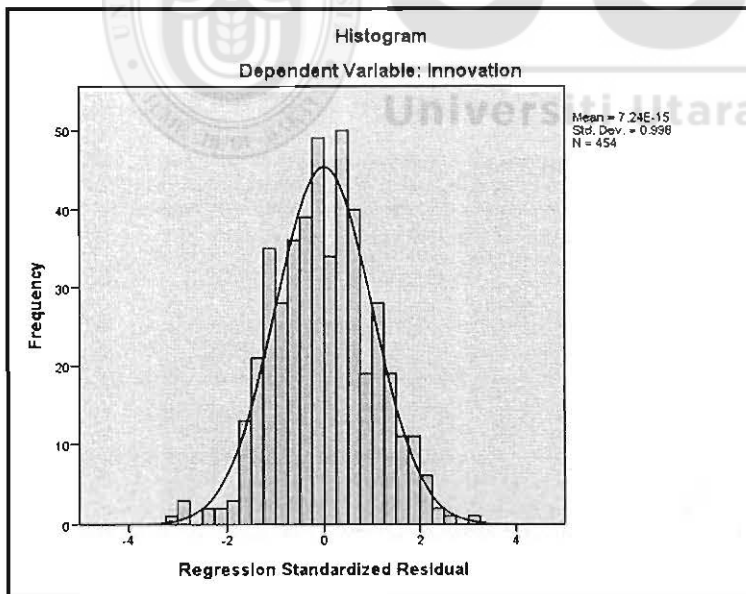
NORMALITY, LINEARITY AND HOMOSCEDASTICITY

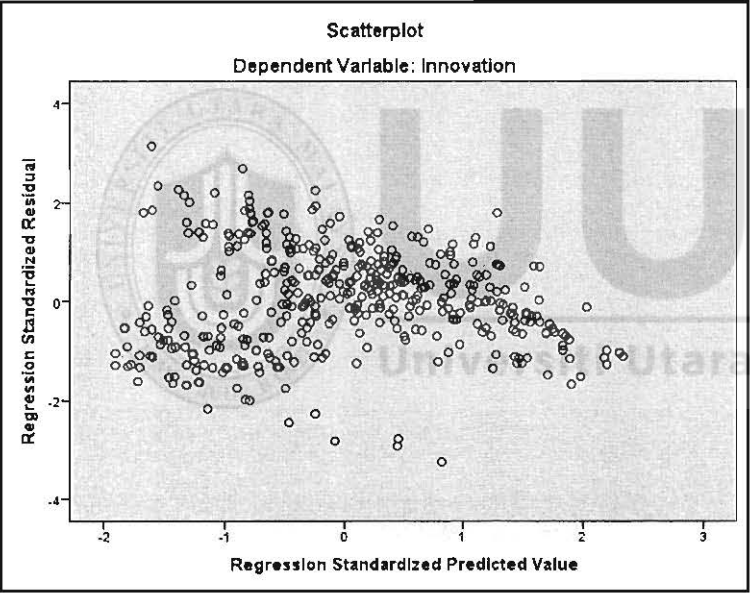
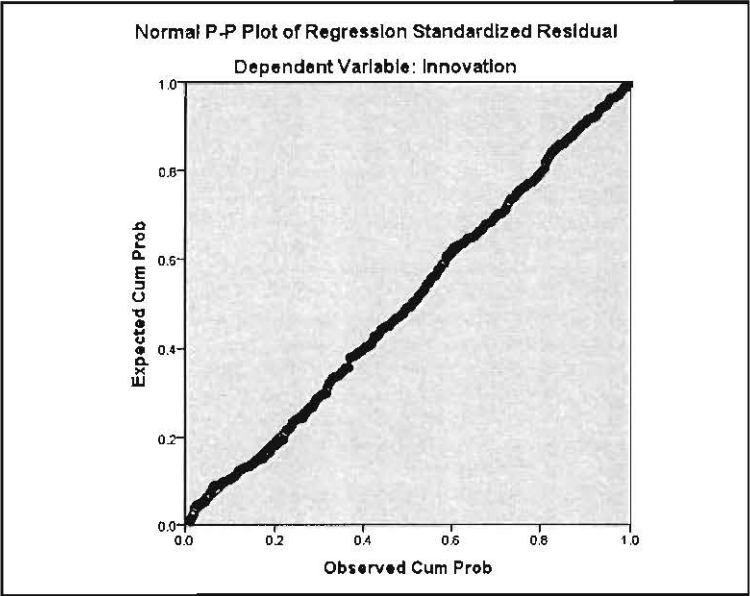
Overall Brand Equity





Innovation

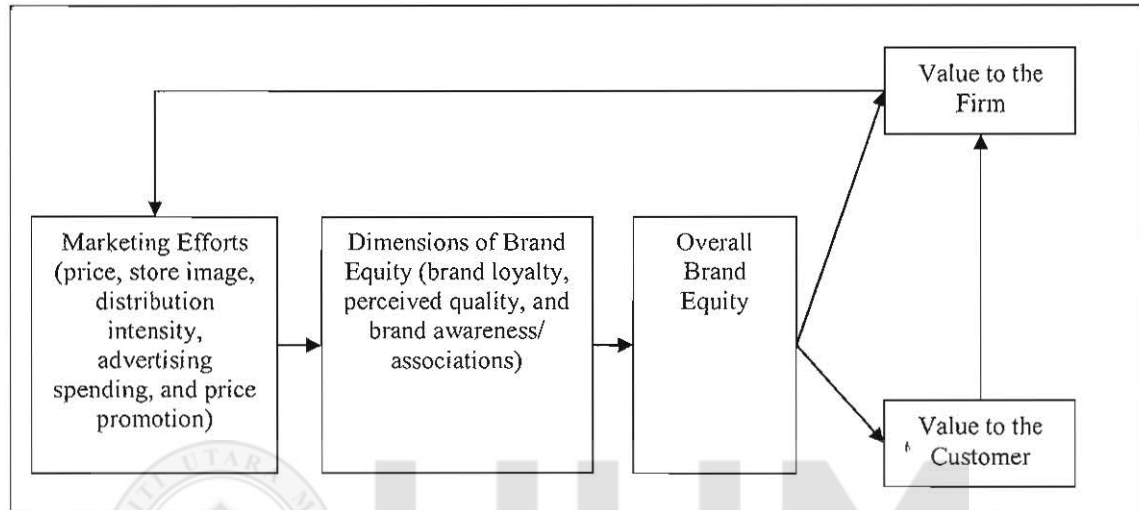




APPENDIX K

RESEARCH CONTRIBUTION COMPARED WITH INITIAL OVERALL BRAND EQUITY MODEL AND EARLIER RESEARCH

Initial Overall Brand Equity Model (Yoo et al., 2000)



Author and Year	Independent Variables	Mediators	Software
Yoo <i>et al.</i> (2000)	Price Store image Distribution intensity Advertising spending Price deals	Perceived quality Awareness/associations Brand loyalty	LISREL
Sampling	Respondent	Industry	Country
Random	Students	Product category (athletic shoes, camera films, and televisions)	U.S.A

Earlier Research Compared with Overall Brand Equity Model

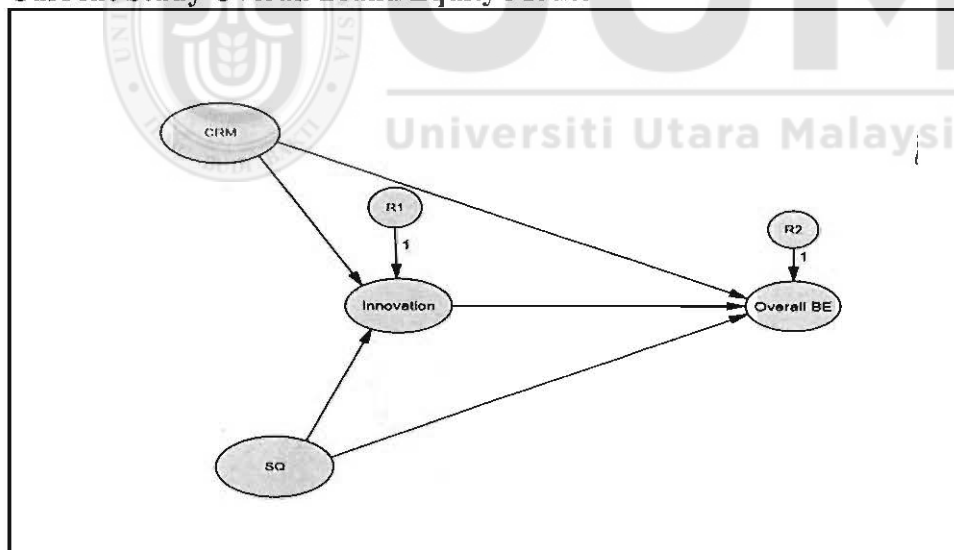
Author and Year	IVs	Mediators	Software	Sampling	Respondent	Industry	Country
Gill and Dawra (2010)	Brand image Brand awareness	Brand awareness Brand image	LINMAP	n/a	Consumers	Toothpaste	n/a
Chen (2010)	Brand image	Customer satisfaction Brand trust	AMOS	Random	Consumers	Electronics	Taiwan
Hossien (2011)	Brand association Brand personality Brand attitude	Brand loyalty Brand image	LISREL	Convenience	Consumers	Chocolate	Iran
Taleghani and Almasi (2011)	Brand awareness Brand image Perceived quality	Brand loyalty	LISREL	n/a	Customers	Insurance	Iran
Chahal and Bala (2012)	Brand image	Brand loyalty	SPSS	Convenience	Patients	Healthcare	India
Emari <i>et al.</i> (2012)	Brand attitude Brand associations Brand personality	Brand loyalty Brand image	LISREL	Convenience	Consumers	Chocolate	Iran
Sheng and Teo (2012)	Perceived ease of use Perceived usefulness Entertainment Aesthetics	Customer experience	n/a	n/a	Consumers	Mobiles	Taiwan
Severi and Ling (2013)	Brand awareness Brand associations Brand loyalty Brand image	Brand associations Brand loyalty Brand image Perceived quality	SPSS	Convenience	Students	Education	Malaysia
Zarantonello and Schmitt (2013)	Brand events Brand experience	Brand attitude Brand experience	SPSS	Convenience	Consumers	Events	n/a
Ng <i>et al.</i> (2014)	Brand credibility	Brand image Perceived value	AMOS	n/a	Consumers	Electronics	Malaysia

Panda and Misra (2014)	Brand Distinctiveness Brand loyalty Brand awareness	Country of origin	SPSS	Simple	University Staff	Durable	India
Murtiasih <i>et al.</i> (2014)	Country of origin Word of mouth	Perceived quality Brand awareness Brand associations Brand loyalty Brand awareness	AMOS	Convenience	Car users	Automobile	Indonesia
Delafrouz and Goli (2015)	Brand credibility	Perceived value Brand image	LISREL	Random	Consumers	Electronics	Iran
Azadi <i>et al.</i> (2015)	Country of origin	Perceived quality Awareness and associations Brand loyalty	LISREL	Convenience	Students	Sports apparel	Iran
Mostafa (2015)	Country of origin Country of manufacturing	Perceived quality Brand awareness Brand image Brand loyalty	SPSS	n/a	Consumers	Mobiles	Egypt
Nguetsop, Amoro, Wang, and Dacka (2016)	Brand awareness	Perceived quality Brand trust Brand loyalty	SPSS	Random	Students	Telecom	Cameroon
Taghian (2016)	Brand extension	Brand image	PLS	Random	Consumers	Groceries	Iran
Ansary and Hashim (2017)	Brand image	Brand attachment Brand attitude Brand awareness	AMOS	Convenience	Students	Products	Malaysia

Liao <i>et al.</i> (2017)	Cognitive factors (brand awareness, brand associations, brand image, perceived quality, and brand reputation)	Brand personality	PLS	Convenience	Consumers	Cosmetics	Taiwan
Hepola <i>et al.</i> (2017)	Personal involvement Sensory brand experience	Brand engagement	PLS	n/a	Consumers	Tableware	Finland
Tuan (2017)	Contact personnel Service organization Customers' interaction	Relationship quality	AMOS	Convenience	Consumers	SMEs	Vietnam
Shabbir <i>et al.</i> (2017)	Brand image Brand loyalty	Brand awareness	AMOS	Random	Customers	Telecom	Pakistan

* n/a not available

Current Study Overall Brand Equity Model



Author and Year	Independent Variables	Mediator	Software
The researcher	Customer relationship management Service quality	Innovation	AMOS
Sampling	Respondent	Industry	Country
Systematic random and simple random	Medical tourists	Medical Tourism	Jordan